# THE GREAT PYRAMID, вY MODERN SCIENCE, AN INDEPENDENT 

 WITNESS, TO THE LITERALCHRONOLOGY of the HEBREW BIBLE, \& BRITISHISRAEL IDENTITY, in accordance with BRÜCK'S 'LAW of the LIFE of NATIONS:'WITH a NEW INTERPRETATION OF THE TIME-PROPHECIES OF DANIEL AND ST. JOHN.

TRANSLATED FROM THE FRENCH OF
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Recently Revised with Five New Appendices by the Author and a Short Note by
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LATE ASTRONOMER ROYAL FOR SCOTLAND

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## SUR LA CONCORDANCE

 QUE EXIST ANTRE
# LA LOI HISTORIQUE DE BRÜCK, LA CHRONOLOGIE DE LA BIBLE <br> et celled de 

LA GRANDE PYRAMIDE DE CHÉOPS<br>AVE ONE INTERPRETATION NOUVELLE dU plan prophétique de la révélation

The above is the original title of M. Lagrange's book. The order of these three distinct subjects has indeed been almost necessarily altered in our title-page to suit the position of the question in this country, but without any detriment to the argument, and for reasons which we trust will fully commend themselves to our readers as they advance in the grand problem before them.

THE PUBLISHER.


## 749078

## PREFATORY NOTE.

With no little pleasure and much hope, I heard in the course of last year that my scientific Belgian friend, M. Chas. Lagrange, Astronomer at the Royal Observatory of Brussels, and author of several noble essays in Mathematical Physics, ${ }^{1}$ had produced a new work on the Great Pyramid in Egypt.

And not on that monument, considered in, and by itself alone, either architecturally, or even Egyptologically; but on its broad, and ultra-ancient bearings on the history of humanity ; as well as on its many proofs of having been directed by high science, though in a totally prescientific age of the world, according to the schools. Altogether more like the writings of some of the prophets of the Hebrew Scriptures in the Old Testament, and certain of the Greek writings in the New, than anything that has been brought to light in recent years in any other part of the world.

I had previously, indeed, been aware that M. Lagrange was studying the subject in accordance with the new scientific key only recently applied to it-with remarkable

[^0]ability and most unusual penetration. For I had been favoured with many letters from him, touching particulars of my own rather crucial measurements when on the hill of Ghizeh, in Egypt, nearly thirty years since ; and on whose exact numbers, in terms of standard scales compared with earth measures in modern times, the new and elevating theory of the Great Pyramid was bound to depend.

But how many other, and chiefly literary authors, in both Europe and America, have sent me just as many interrogatory epistles, subsequent to the publication of my three 8 vo volumes, entitled "Life and Work at the Great Pyramid in 1865." And after obtaining my best answers to all they chose to demand, have simply let the subject go to sleep again; leaving the world no better informed than they found it; and, as they apparently believed it was, and was always to be, a mere accidental mass, going on upon a dead level of circumstance for ever and ever.
M. Lagrange was therefore evidently another style and capacity of man ; a better friend of humanity, and a truer disciple of progress. For when he found himself arrived, by his own indomitable labours of research and extensive collation of facts and figures from various sources, at new demonstrations and collateral proofs of what he believed to be veritable turning points in an expanding history of man and Revelation, past, present and to come-his soul earnestly yearned to impart his discovery to others, for their inestimable advantage.

Now, all this was a perfectly legitimate case of continued
evolution and unceasing growth, so far as it could be proved, of the new idea, first opened up and set distinctly before the world by the late venerable John Taylor, of Gower Street, London, in his little duodecimo volume entitled " The Great Pyramid: Why was it Built, and Who Built It ?"

He unfortunately was called away from his work on earth, in July, i864, aged 88 years. But it was specially to test his prime idea by more accurate and responsible measures of the best preserved and most suitable parts of the grand monument, than had up to that time been applied to its investigation, that my dear wife and self went out to Egypt in the close of that same year, without any Government aid, but laden with measuring apparatus; and found the work, after once making a beginning, really rather easier than had been expected.

So signally, too, was John Taylor's last theory confirmed, and so many further correlations of a like kind were revealed by the new measures, that amongst not a few individuals who were presently convinced thereby (after the data had been fully and further discussed during the ten following years), was that other dear old man, and world-acknowledged master of many sciences, the Abbé Moigno, Chanoine de St. Denis, in France.

Most entirely convinced, indeed, was he that the above method of research was the true road for the explanation of that largest and best preserved of all the works of primeval man, in an age when, according to Holy Scripture, direct communications between man and his Heavenly Creator were less infrequent than now. Wherefore the
good Abbé presently launched upon the world the XLIVth number of his "Actualités Scientifiques," with the following terse, yet most comprehensive and suggestive title :-

> "La Grande Pyramide, Pharaonique de nom, Humanitaire de fait.

Ses Merveilles, ses Mystères et ses Enseignements."
Yet when, long after the worthy Abbés lamented death, there appeared a new figure on the Pyramid scene, in M. Lagrange, of Belgium-and my opinion on his book was applied for-objectors and critics in London had so multiplied that my first step was to ascertain whether this new spirit of the time was fully aware of all that had been written in our country against my views and measures during the last few years; and chiefly by one observer under the patronage of the Royal Society, London.
" Oh ! certainly," responded M. Lagrange, immediately; "and all my best confirmations of your earlier measures and various conclusions are actually derived from these later attacks, which I have studied deeply, thoroughly, and thank the author of, with all my heart, for their having produced effects he never intended."

Then that being the case, and when I had read through the whole of M. Lagrange's own book, from the first page to the last, with continually increasing admiration of his respect for Scripture, knowledge of the Pyramid, acquaintance with science in general, and history of many
nations, both in accomplished fact, and in the looming of prophetical futurity-gaping already to swallow up the present days, and accomplish thereby some of the Scriptural mysteries of God in the government of man-I began to wonder why the Belgian book was not already in the hands of every English man and woman, and in their own language?

That, however, is exactly what is now being prepared for, by this present publication, under the auspices of Mr . W. Isbister, the publisher, with others, of my earliest Pyramid essays, more than a quarter of a century ago ; and of the latest of them, too, or the Fifth Edition of "Our Inheritanee in the Great Pyramid," London, 1890. There remains, therefore, little more for me to do than to lay before the readers of his thus effectively translated work, something like a personal view of the author himself; a Belgian, but not R. C.

Of another author on the Great Pyramid, the gifted Abbé Moigno had written, in the choice terms which from him were praise indeed:-
" He is a man of immense and varied knowledge, of profound convictions, of severe morals; deeply religious. One whom science, falsely so-called, has never seduced, never entangled ; who is quite aware of its dangers, and against which he makes incessant war. He has, without doubt, an original genius, is on many accounts a true spirit of the olden time-a figure of another age. But he knows how to control his imagination, and never marches forward but when supported by positive arithmetical numbers, which none can pretend to deny or resist."

Well! All that might have been written as of M . Lagrange; for he is all that, and more too, even three times repeated! A genuine Protestant as of Reformation age, reading the Holy Scriptures at home, by the side of a sainted and loving mother, from his childhood up; and capable of rising, with expanse of soul in these latter times high above petty differences among various Christian Churches, to the one Divine origin and source of Salvation to them all. Salvation to soul and future life, for merciful purposes of God Himself, recorded to the same end in both the Holy Scriptures and the Great Pyramid. In somewhat unusual characters in the latter, no doubt, but destined to be fully interpreted before the end comes.

Reader, earnest and true! Will you not strive to behold and judge for yourself how far these fateful signs have now been interpreted in this latest and best Pyramid book, taking it all in all, that I, at least, am presently acquainted with :-

C. Piazzi Smyth, LL.D. Ed., F.R.S.E., F.R.A.S., and late Astronomer Royal for Scotland.

Clova, Ripon, April, 1894.

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## INTRODUCTION.

1. I cannot help thinking, in writing the title of this book, that one of the rules of the art of persuasion should be, if possible, never to use words whose collision may be disastrous. Will the kind reader, arrested for a moment, perhaps, by the heterogeneous character of the subjects of this title, allow me to remind him of the difficuit but elementary rule, that the mind must be divested of all preconceived opinion, when the study of the correlation of an order of facts is in question; a book of research on an entirely new subject is nothing less than a collaboration, in which the reader shares with the author the perilous honour of judiciously applying the method.
2. My data are established by three documents: The first, the work of Major R. Brück, an Officer of the

Belgian Engineers, sets forth the chronological laze which presides over the succession, the duration, and the various phases of the life of the nations. ${ }^{1}$

This law is established by observation.
The second is the Bible; ${ }^{2}$ by its chronological data, whether historic or prophetic, it embraces both the past and all the future of humanity, and its spiritual dispensations seem to be embodied in an organism where everything is ruled by number, weight and measure.

The third is the collection of very exact measurements of the Great Pyramid of Gizeh, recently obtained, first (1865), by one of the most eminent astronomers of this century, M. Piazzi Smyth; ${ }^{3}$ afterwards (1883) under

1 "Humanity: its development and its duration," by R. Brück, formerly pupil of the Military College of Belgium, Major of Engineers. 2 vols., 8 vo ; ci. $-1,231$ pages. Paris and Brussels, 1866.

[^1]the auspices of the Royal Society, London, by M. Flinders Petrie. ${ }^{1}$

Each of these three data contains a metric element, and it is in consequence of this common feature that the correlation between them exists and may be verified.
3. It is now twenty years since I first read the works of Brück (1871). Since then, notwithstanding the preoccupation of other work, the subject has always been in my mind. Brück had partly seen the agreement between his historic law and the chronology of the Hebrew text of the Old Testament for the early times $;^{2}$ and long ago this harmony struck me as being one of the most decisive external arguments in favour of the authority of the Sacred Book.

The recognition of this harmony at once established a correlation between the two first data.

Another correlation exists between the second and third. In the course of this work (§ 15), several numerical

1 "The Pyramids and Temples of Gizeh," by W. M. Flinders Petrie. New and revised edition, I Vol., 8vo. London. (See also "New Measures of the Great Pyramid by a New Measurer," by C. Piazzi Smyth. London, 1884.)
${ }^{2}$ Lee's "Humanity," Vol. I., pp. 182-203.
facts will be quoted, which were derived long ago from measurements of the Pyramid. By them M. Piazzi Smyth ${ }^{\mathbf{1}}$ has been enabled to demonstrate with a certitude of scientific order :
(r.) That the Pyramid is a monument of Hebrew origin;
(2.) That this marvellous stone book records the fundamental truths of astronomy and physics with a precision equal to that of modern science, and discloses these truths by means of a unit of measure derived from the terrestrial globe ;
(3.) That the metric system of the Pyramid and that of the Bible are identical ;
(4.) That probably the chronology of the Bible, taking for argument the spiritual dispensations of Moses and of Christ, is itself accurately inscribed in the Pyramid by the diagram of the interior passages, traced in a plane meridian ; the ordinate of this is a function of $t: m e$. In any case the form of the diagram symbolises in a remarkable manner the dispensations in question, and its dimensions (by proportioning the lengths to time) agree with the dates of

[^2]Biblical chronology as well as could be hoped, seeing that the latter are a little uncertain at the present day. ${ }^{1}$
4. If the three elements of the question are designated by 1,2 and 3 respectively, it would result from what precedes that 1 and 2 are definitely connected with each other, 2 and 3 are likewise connected; but if these elements belong to the same systematic reality, it ought to be possible to complete the triangle; that is to say, there ought also to exist an intimate connection between I and 3, between Brück's Law and the metric system of the Pyramid.

Now, this third direct correlation actually exists: Brück's


#### Abstract

${ }^{1}$ I became acquainted with these researches five years ago (in 1887) through a book of amusing science by Proctor, who makes merry at the expense of the " Pyramidalists." Having been struck, in combining the only numerical data of this same book, with the exactness of the geometrical proportions upon which the incriminated theory rested, I have analysed the problem independently, remade the calculations for all the principal propositions, making use of the measures of different observers, beginning with the French expedition in 1799, and fixing the choice between the possible hypotheses by the method of progressive exclusion. My conclusion is, that in every other matter the accumulated probabilities would be considered more than sufficient to constitute what is called in physical sciences a demonstration.


kistoric period is measured, and its phases even are symbolised in the most conspicuous manner in the Great Pyramid of Gizel.
5. The three elements having been recognised within each other, we must now study the question of their agreement more closely; and this study ought, if the premises are exact, to assume the character of a growing verification. This, also, is abundantly realised, and with the degree of exactitude which we have a right to demand by the best established physical theories.

The chronology of the Pyramid is exactly identical with the literal chronology of the Bible; all the prophecy of the Bible is there symbolised, and all the numbers it contains are there measured.

Brück's historic period of the life of nations gives us the key to this exact harmony and to the interpretation of prophecy.
6. To establish the harmony of which we have just been speaking, is to demonstrate at once the authenticity or authority of the documents upon which it rests.

Three witnesses, so independent that, by a singular renversement, the bare idea of their being connected awakens incredulity, unite to render testimony which is identical.
(r.) A monument of stone placed at the threshold of history, ${ }^{1}$ the interior construction of which has remained hidden from the ancients ; ${ }^{2}$
(2.) A scientific law discovered in our own time, a law to which its author was directed in the first place by a physical theory of the globe;
(3.) A Book written not by a man, but by a people.

If the identity of absolutely independent testimonies is any proof of the sincerity of the witnesses, it is equally a proof of the truth of what they advance.

The interest here at stake is, therefore, not simply that of a curious speculation; it is nothing less than to show by external proofs, having the force of numbers, the Divine Inspiration of the Scriptures; to decide, with this same force, upon their true interpretation; lastly, to establish on an immutable scientific basis all the history of humanity with its chronology; to establish also the reality of a rapidly-approaching end, announced during long centuries by the prophets, and which that history is on the point of attaining.

Thus the sole possible interpretation of the facts is, that

[^3]the Great Pyramid and the Bible are both works of divine inspiration. If the immutable book of stone, in which are written simultaneously the main truths of the most advanced science of to-day, and in which the spiritual truths of the Bible are symbolised-if the Pyramid, I say, has been sealed and fixed at the beginning of time, it is in order that, being understood in these latter days-the days of scientific external facts-it may render the most powerful external evidence to these eternal truths, which are unacknowledged and yet are alone essential.
7. The exposition, and the development, complete and detailed, of all the questions which are raised in the course of the following pages, might have furnished matter for a very extended work, the publication of which would have been long delayed. In view of the extreme importance of the truth which has been defined, I do not feel justified in deferring the publication any longer. I have therefore resolved to present a statement of it in a condensed form, which, although it may cost the reader a little trouble, yet contains all that is necessary and sufficient for a complete demonstration.

After having, rst, simply stated Brück's law; 2nd, established the literal chronology of the Bible; I shall,

3 rd, approach the subject of the Pyramid by a succinct description of the monument. It will, nevertheless, be sufficient to give an exact idea of the state of the question when I recur to it, and to make the reader acquainted with the data of which I shall make use.

Armed, then, with the law of nations and with chronology, I need now only read the Bible and the Pyramid side by side, to see the verifications, growing always stronger, at once demonstrate their identity, and bring to light the unique truth which they express.

It is here especially that my work must be abridged. I shall certainly say all that is necessary, but shall make continual references to the Bible, which I shall suppose to be in the hands of every reader.
8. It is exactly at this point, by natural and methodical steps, that the truth which I here present unfolds itself before me. It is not a tottering system, painfully bolstered up, but rather the note-book of an explorer, relating his discoveries as he advances, and even discovering many things which he was very far from suspecting, which at first surprised him, but which a more profound verification forced him to admit, and which more recently have been justified in a striking manner by the unexpected light
which they throw upon the whole subject. The result of this methodical advance will be seen in the interpretation of the Book of Daniel and of the Apocalypse. This interpretation-entirely new, I think-will perhaps astonish the reader at first ; but I do not doubt that, after a little reflection, it will appear to him in harmony with the dignity and the spiritual purport of the Sacred Text.
9. Whatever difference of opinion there may be with regard to the ideas in question, there is one common point which permits an understanding between scientific minds, to whatever school they may belong, and to these alone I here address myself; that is, the point of fact. Upon this I take my stand, asking all to examine without prejudice, and leaving it to produce its own consequences.
10. The elevation of the subject at this point demands more strongly than elsewhere a bold freedom of exposition. But the spirit which animates me would be wholly misunderstood if, in the name of this freedom, I were indifferent to the painful and inevitable attacks which it makes upon certain convictions. One part of my demonstration sets me in direct opposition, as to the idea of the true Church, to the views of men whose characters and senti-
ments I most profoundly esteem, and whose friendship I feel it an honour to possess. I deeply regret this position. I must ask those of whom I speak to put themselves in my place, and to decide whether, possessing such a proof in favour of revealed truth, it was permissible to withhold it. I must ask them to rise with me to that level, where lofty spirits, divining the presence of God, find a bond of sympathy even in the perception of the common misery which creates their discord. Lastly, if they consider the terms too harsh which censure the alloy of base metal and pure gold in the Church, let them reflect that these terms, which derive their force only from their depth, emanate from an Authority whose severity strikes not to wound, but to heal.
11. I cannot conceal that for me personally a profound interest lies beneath that of an arithmetical proof, and that it is impossible to treat with my interiocutors as if "they were a proposition." ${ }^{1}$

I consider the present demonstration as of vital interest to Christianity, at a time when it is a common feature in the spirit of our teaching to demonstrate that Science and the Bible are incompatible, and when the discredit thrown

[^4]upon the Sacred Book reaches even to its vital elements. This demonstration is useful to all. It may prove especially so to those who, having come to the close of the rapid survey which is called University education, and having perceived that there is something in Science beyond geometry and mechanics, would like to attempt the discovery of this unknown world. Further reflection will show them that, in passing from the external to the moral world, nothing is changed in scientific method, and that in the one, as in the other, a similar procedure leads to personal faith. But awaiting this fruit of experience, the objections of purely material science constitute a frozen iceberg, an impassable barrier, against which the mind may exhaust itself in vain.

The present demonstration clears away this pitiless obstruction, not by the dissolving action of a never-ending discussion, but by the irresistible mechanical power of a fact.

## THE GREAT PYRAMID

BY MODERN SCIENCE AN INDEPENDENT WITNESS

## TO THE LITERAL CHRONOLOGY OF THE

## HEBREW BIBLE

and to
BRÜCK'S "LAW OF THE LIFE OF NATIONS."

## CHAPTER I.

BRÜCK'S LAW OF THE LIFE OF NATIONS.

1. Nations, like individuals, are born, live and die.

Let us suppose that an observer exterior to the globe were to analyse the phenomenon of the development of humanity, that is to say, the advance of civilisation on the surface of the earth, he would perceive this phenomenon to be regulated by a law; this law comprehends :-
ist. A term of precession (which had been already observed before Brück) ; it tells of the secular displacement of civilisation from east to west, from the commencement of history down to the present day; 2nd, a
periodic quincentennial term; by a systematic succession of phases at ascertained intervals always the same :-
I. Constitution,
2. Preorganisation,
3. Organisation,
4. Apogee,
5. Decadence,
this term affects the civilising centres which mark the stages of the term of precession.

To grasp these ideas we might illustrate this movement by that of two movable meridians; the one, the meridian of precession slowly draws from east to west the centre of civilisation (a centre which Brück calls the chief nation), the other, the quincentennial meridian makes the tour of the globe in about five centuries (also from east to west), and the phases of the quincentennial period depend on the position of this meridian with regard to the centre of civilisation. The time taken by the quincentennial meridian to return to the same place, that is to a fixed meridian, according to Brück, is 516 years; and the time taken to return to the meridian of precession, necessarily a little longer, is 520 years.

Five hundred and sixteen years is the length of time which separates, for instance, the successive apogees of a single nation, having a fixed centre, subject to periodic undulation; 520 years is, on the contrary, the length of
time which separates the apogees of successive chief nations, of those peoples who mark, like milestones, the centennial march of civilisation. ${ }^{1}$
2. This law must be verified ; but I shall intentionally avoid reproducing the same numbers as Brück. An independent attempt, guided simply by the broad features of general history, will suffice to prove it; small differences will necessarily present themselves; but precisely because they are insufficient to alter the essential term of the law, they demonstrate, in their own way, its validity.

The term of precession, or the general movement of civilisation from east to west from the commencement of history, is shown by a simple survey of the wholestarting from Chaldea, then oscillating between the banks of the Nile and those of the Jordan, civilisation has since been progressively displaced along the parallel of the Mediterranean; it has reached the dorsal ridge ot Europe, has passed it, and, creeping towards the North, has taken possession of the western limit of Europe, the British Isles, and has crossed the ocean, conquering the New World. This New World it has crossed, and seems

[^5]about to crown its circular course by absorbing in the meeting of its flood and of the European ebb which it attracts, those primitive regions of the Asiatic world whence it set out, carrying back to them under a new form, after more than four thousand years, the consummation of the principle which gave it birth.

The periodic term of the law from the special point of view of this study, has still more import than the term of precession. That from the origin of history down to the present time nations ${ }^{1}$ have been born, have lived and have disappeared from the arena of the world, is a primary and evident historic theorem. Egyptian civilisation precedes that of Jews, Israelites and Phœnicians; after them, Greece attains her apogee, then declines.

Rome commands the world, then falls in its turn. Constantine decapitates its immense empire. In point of fact it divides itself into three parts; the East vegetates under the name of the Lower Empire ; the centre sustains a work of preparation under the growing influence of the spiritual power, which five centuries later, materialising itself, was to dominate the whole of Europe for a period of five centuries; the West, the Frank kingdom,

[^6]violently infiltrating a new blood, and, such as the Church of Rome could present it, the spiritual principle risen from the ashes of the past, is at once the continuer and regenerator of the upward movement; it is the virtual home of the civilisation of the time.

Charlemagne sums up and pours forth his acquisitions; he throws the future Europe, as the partition of his empire already points out, into the arms of the Papacy. The latter absorbs it ; to construct the machinery of the vast Catholic monarchy, it associates with the body proper of the clergy and of the great religious orders, all the civil powers of the enthralled nations: It is a sword whose handle is at Rome, the point everywhere. But at the beginning of the fourteenth century growls the storm of freedom; political enfranchisement at a signal already given by the whisper of liberty among the commons; enfranchisement of the very principle of civilisation at the first imperative claims of that Reformation (Wiclif) which, during a period of five centuries, was to strive to bring back the Church to the purity of the Gospel.

The Reformation dawns in the lands of the future nations, the North; the Papacy, the menaced power, galvanises the nations of the past, the South.

The struggle between these two portions of Europe constitutes modern history. France, the power which, as centre of the new civilisation, balances the movement, is an intermediate element. Its mission is the accomplishment of
a first term, political enfranchisement. Its experience is summed up and violently asserted in 1789 at the end of a quincentennial period; then the genial impulse given by Napoleon pours it forth towards the east, exactly as, two and four periods earlier, Charlemagne and Alexander had done for the experience of the Franks and the Greeks.

Napoleon, Charlemagne and Alexander, separated from each other by about a thousand years, are three phenomena of the same order.

To sum up these broad features, let us personify the movement of civilisation as that of the chief centre which as far as the present time has not ceased to exist and to constitute a chief nation. To begin with the Assyrians, ${ }^{1}$ it will be seen that history may be determined by the order of the following Powers:-
(a) Assyrians.
(b) Egyptians.
(c) Jews-Israelites-Phœnicians.
(d) Greeks.
${ }^{1}$ We shall see further on, when we begin the history at the Deluge, that it will be necessary to quote also the Noachians before the Assyrians. The reality of the Deluge is to be found mathematically established in an "Étude sur le Système des Forces du Monde Physique," pp. 330-555, published in the " Mémoires de l'Académie Royale de Belgique," volume xlviii. This universal telluric crisis signalises the definite establishment of the present relief of the globe (the Asiatic-American meridian upheaval).
(e) Romans.
(f) Franks.
(g) Papacy.
(h) French.

The number in order following belongs to England, whose pre-eminence in the course of the historic period which commences to-day begins already to assert itself.
3. This succession makes manifest the existence of a period in the phenomenon. Let us first try to estimate the average duration of the life (or, more exactly, of the period of special activity) of nations (purposely omitting in such a brief account all that might require too lengthy discussion or exposition).

No. $d$. (Greeks). From the foundation of Athens by Theseus in -1219 to the destruction of Sparta (Philopoemen, the last of the Greeks), in -188 , there are 1,031 years, or twice 515 years.

No. e. (Romans). From the foundation of Rome by Romulus in -753, to the desapitation of Rome by Constantine in +330 , which brings the Roman Empire, properly so called, and the ancient world to an end, there are 1,083 years, or twice 541 years.

No. f. (Franks). From the epoch -II4, which marks for the first time an open struggle between the Germans
and the Romans, up to the partition of the Frank Empire (Treaty of Verdun) in +843 , there are 957 years, or twice 478 years (this number must, $\dot{a}$ priori, be considered as too small, since the event ascribed to the date -II4 is already, in all probability, the consequence of an anterior federal movement among the Germans).

No. g. (The Papacy). From its establishment (de facto) at Rome in $+330^{1}$ up to the fall of the effective temporal power, 1309-1370 (Avignon), 1347 (Rienzi), there are (taking the mean of these dates) 1,010 years, or twice 505 years. Note that the second fall of the temporal power in 1870 is again separated from the first by a period of five centuries.

The Empire of the East, or the Lower Empire, which, like the Papacy, is the result of the partition of the Roman Empire, begins like it in 330 and ends in 1360 (invasion of the Turks; Adrianople, the Capital of the Sultans). Now, from 330 to 1360 there are 1,030 years, or twice 515 years.

No. $h$. (France). Since its formation (at the partition of Charlemagne's empire, Treaty of Verdun), in 843 , up to the present epoch of constitution, 1870, there have passed 1027 years, or twice 513 years.

[^7]Whether we reckon the Franks or not (the duration of their empire calculated above is evidently too short for the reason indicated), we find for the mean of this millenary period 1,023 or 1,036 years. The difference is of no importance here. This result confirms the exactitude of the number 1,032 years given by Brück, and the limit of ten centuries to which Quetelet makes allusion. ${ }^{1}$ This is the length of time during which the existence of a nation as chief nation has hitherto manifested itself in the historic movement.
4. But this millenary period is not only remarkable for the constancy of its value ; it is also marked by the regularity of its recurrence. The beginning and the end of these millenary lapses of time pertaining to the successive chief nations belong, in the chronological scale, to a single series of equidistant points, comprising intervals of five centuries, the beginning and the end of each of these lapses of time coinciding with the centres of two others.

This brings to light the existence of a new period, which is the quincentennial.

This period is clearly shown from the table of the

[^8]beginnings and ends of the millenary periods which have just been pointed out:-

Beginnings:
$-1219-753 \quad \cdots \cdots . \quad+330+843$
Ends:

$$
\begin{aligned}
-188+330+843 & +1340 \vdots+1870 ; \\
& +1360
\end{aligned}
$$

The differences are :

$$
\begin{array}{llllll}
466 & 565 & 518 & 513 & 497 & 530 \\
& & & 517 & 510
\end{array}
$$

5. The consideration of this regular succession at once renders more precise the survey which we have made above of the succession of the chief nations; it shows that each one of them has, in a special manner, served as leader in the march of humanity during a quincentennial period. Without specially developing this point, which will be shown from what follows, let us now examine the quincentennial period in itself, that is, in the succession of its different phases. These phases are five in number, and their epochs are distant from each other about a century.

In the course of a period, a nation, Ist, constitutes itself; 2nd, passes through a period of preorganisation; 3rd, organises its forces; $4^{\text {th, }}$, rises to a maximum of power, or apogee; 5th, declines and passes through a crisis of degradation and corruption, before reaching the new epoch
of constitution, which terminates the period and begins the following one.

Between the degradation and the constitution, a short period of the greatest brilliancy is noticeable, during which the nation rapidly summarises its experience, the end of its mission, and abruptly pours it forth upon humanity (examples are to be found amongst the Greeks, the Franks and the French, the leaders during the short period of greatest brilliancy being Alexander, Charlemagne and Napoleon).
6. The epochs of constitution have already been indicated; they are the beginnings of our millenary periods. The present epoch is an epoch of constitution; it determines and enables us to recognise immediately all the others.
7. The apogees mark off the quincentennial period in a conspicuous manner; they characterise epochs universally known and long since consecrated by history; they enable us to go back from the present time to a period more remote than that of the Greeks, as far as the Jews-Israelites-Phœenicians and Egyptians, in order that we may establish the law of the life of nations.

The apogee of the material power of Rome, measured by the maximum extension of the empire, took place under

Vespasian and Trajan. Let us take the mean date of their reigns, say +93 , as a starting point, and proceeding on the chronological scale by intervals of 518 years ( $\frac{1036}{2}$; this is the quincentennial period previously deduced from the epochs of constitution), we shall obtain the following series:-

$$
\begin{array}{lllllll}
-1461 & -943 & -425 & 93 & 611 & 1129 & 1647 ;
\end{array}
$$

And these dates are of themselves sufficient to point out the apogees :-

Egyptian (century of Rameses II.).
Jew-Israelite-Phœnician (mean of the reigns of Solomon, Hiram, Ethbaal, -947).

Greek (century of Pericles, centre of the reign -433).
Roman (century of the Flavians and Antonines).
Frank (middle of the reign of Clotaire II., who centralises the power organised by Clovis, 604).

The Papacy (Innocent III., II98).
French (century of Louis XIV.).
8. The epoch of apogee is preceded, at a distance of about a century, by that of organisation. This interval of a century constitutes the brilliant phase of a nation. The epoch of organisation of the period which is just finished is that which is called the Renaissance, Let us take, as the central date of this last epoch of organisation, the middle, 1520 , of the life of Francis I. Ascending into
the past by periods of 518 years, we shall find the following series:-
$1520 \quad 1002 \quad 484 \begin{array}{llll} & -34 & -552 & -1070 ;\end{array}$
and these epochs sufficiently point out the organisersFrancis I., Sylvester II. and Gregory VII., Clovis, Augustus, Pisistratus, David.
9. The epoch of degradation and corruption, on the contrary, follows the apogee by about a century. The eighteenth century in France shows this in the clearest manner. Still ascending by periods of 518 years, and starting from the central date, 1742 (the middle of the life of Louis XV.), we obtain the series :-

$$
\begin{array}{llllll}
1742 & 1224 & 706 & 188 & -330 & -848
\end{array}
$$

We need only underline these dates with the events ascribed to them :-

Regency. Louis XV.
Inquisition. Dominicans.
Rois Fainéants.
Commodus. Heliogabalus. Roman Anarchy and Corruption.
Dislocation and Dismemberment of Greece.
Athaliah. Worship of Baal.
10. Philosophical tendencies undergo a periodic fluctuation in immediate connection with the preceding movements.

The phase of degradation and decadence is that of materialism, empiricism, negation and idolatry, under all their forms.

The apogees are spiritual. In this respect, suffice it to recall, from the Egyptian apogee to the French apogee, the following names, which succeed each other at intervals of five centuries :-

Moses.
Solomon.
Socrates.
St. John.
St. Gregory the Great. St. Columban.
St. Bernard. Abelard.
Descartes. Pascal. (Newton).
The epochs of organisation which pave the way for the apogees are, like them, spiritual; but, in addition, they are remarkable as times of great quickening of the religious spirit. To exemplify this, connect the dates of organisation with the names of :-

Moses.
Samuel. David.
Pythagoras. Daniel.
St. John the Baptist.
St. Benoit. Clovis.
Sylvester (the Reformer).
Luther. Calvin. (Kepler).
The most interesting feature of this last list, from the historical problem point of view, is to show by an external proof that the Reformation of the Sixteenth Century
carries on the normal development of the Christian idea. Luther and Calvin correspond to the great religious organisers of all previous periods.

It is interesting to compare with this external indication relative to the Reformation, another indication of the same kind, relative to the nature of the Papacy, and which is derived from the law of the quincentennial succession of nations. This law chronologically assigns to the Papacy a place in a chain of terrestrial powers, which are born, live and die.

Preorganisation precedes organisation by about a century. The former was characterised in the last quincentennial period by the Councils of Constance (1414-1418) and Basle (1431-I443).
11. What has been said, however rudimentary it may be, suffices to demonstrate the reality of the law, and to make it known in its essential features. Besides, I have designedly only made use of such chronological data as are relatively near and universally admitted. To verify the law in a still more remote past, we must depend on the chronology of the Bible. Now, the establishment of that chronology is an integral part of our subject. Therefore, the study of our first point leads us of itself to the immediate examination of the second.

## CHAPTER II.

## LITERAL CHRONOLOGY OF THE BJBLE.

12. The chronology of the Hebrew text of the Bible does not present any ambiguity to the reader who simply follows the literal sense of the sacred Book, referring to this Book alone, and setting aside all systematic prejudice relative to its spiritual interpretation. The following is the direct or literal chronology; the exactitude of the passages can easily be verified.

## CHRONOLOGY OF THE BIBLE.

[First solution in the order of methodical research (see further on §17, remark 3) obtained by adding, just as they are, the lapses of time given in the Bible in round numbers as whole years.]

TABLE I.
From the Birth of Adam to the Deluge. (Gen., V., VII.).


| From the Deluge to Abraham. <br> (Gen., XI.). |  |
| :---: | :---: |
| (Gen., XI., ro). From the Deluge to the birth of Arphaxad .From the preceding birth to the birth of Salah . |  |
|  |  |
| " | of Eber |
|  | Peleg |
|  | Reu |
| " " | of Serug . . . . . . 32 |
| " " | of Nahor . . . . . 30 |
| " " | of Terah. . . . . . 29 |
|  |  |
| Time elapsed from the Deluge to the birth of Abraham . . . 292 |  |
| Length of the Reigns of the Kings of Israel and fudah. |  |
|  |  |
| I. Kings, II., II, David $\left\{\begin{array}{l}\text { at Hebron } \\ \text { at Jerusalem } 33 \text { years }\end{array}\right\} 40$ years. |  |
| I. Kings. Years, I. Kings. - 40 " |  |
|  |  |
| XV., 2 . . Abijam . . 3 XV., 25 . . Nadab . . . 2 |  |
| XV., 10.4 . Asa . . 4 I XV., 33 - Baashah. . 24 |  |
| XXII., 42 - Jehoshaphat - 25 | XVI., 8 . . Elah |
| III. Kings. 8 XVI., 15 . Zimri (7 days) |  |
| VIII., 17 • Jehoram • 8 | XVI., 23.0 Omri . . . 12 |
|  |  |
|  |  |
|  |  |
|  |  |
| XV., 2 . . Azariah . . 52 | XV., 33 . . Jotham . . . 16 X., 36 - Jehu . . . . 28 |
| XV., 33 - . Jotham . . 16 | XIII, , r . Jehoahaz . . 17 |
| XVI., ${ }^{\text {2 }}$. Ahaz . . . 16 XIII., io . Jehoash . . . 16 |  |
| XVIII., 2 . Hezekiah . . 29 |  |
| XXI., I . . Manasseh . . 55 XV ${ }^{\text {a }}$ |  |
| XXI., 19 . Amon. |  |
| XXIII., 3I. $\begin{gathered}\text { Jehoahaz (3 } \\ \text { months) }\end{gathered}$ |  |
|  |  |
| XXIII., 36 . Jehoiakim . . II | $\text { XV., } 23 \text {. . Pekahiah }$ |
| XXIV 8 (Jehoiachin (3 XV., 27. Pekah • ${ }^{2}$ |  |
| XXIV., i8 . Zedekiah . . ir XVII., r months) Hoshea . . . 9 |  |
| Total length of the reigns from Rehoboam to Zedekiah, 393 years. |  |
|  |  |


13. How does this chronology accord with the quincentennial law?

Let the reader review in his memory the old table of primeval times. He will see that several names and several fundamental epochs stand out conspicuously, in the three thousand years which extend from Adam to Solomon; it will suffice to recall :
(土.) Adam-Seth. - BURROWS
(2.) Noah-Shem.
(3.) Abraham-Jacob.
(4.) Moses-Joshua.

Now, these groups not only: (ist.) Mark out intervals of five centuries, but (2nd) they each occupy one of those spaces of a century which constitute the brilliant plases of Brück's historic period, and which extend in each period from organisation to apogee.

Adam, Noah, Abraham and Moses, who personify in these early times, the great movements of religious inspiration, indicate precisely the succession of those epochs of organisation whose religious character we have already recognised, epochs, the last of which was so forcibly emphasised by the Reformation of the sixteenth century. We have, in fact :


and, by the addition of entire multiples of 518 (a value which we have already used above), these epochs correspond to the following dates,

$$
\begin{array}{llllll}
1514 & 1534 & 1516 & 1489 & \text { and } & 1552
\end{array}
$$

of which the mean, 152 I , is the date ( I 520 ) which we have adduced as that of the epoch of organisation in the last period (the French), an epoch which was that of the Reformation.

The Deluge, -2528 , took place at an epoch of apogce, that of the Noachians. In fact, it corresponds, always by means of our period of 518 years, to 1616 , which reaches beyond the epoch of organisation (1520) by a century, ( 1647 was the date we previously advanced for the French apogee ; Bruick's number is 1631 ).

The construction of the Ark, which takes a century, occupies then in the period $\mathbf{- 2 7 9 2}$ to $\mathbf{- 2 2 7 4}$, precisely that brilliant phase of a century, which extends from organisation to apogee.

An observation still more remarkable, perhaps, is to be found in the fact that the Dispersion (Tower of Babel, Gen., X., 25 and XI.) coincides exactly with the phase of decadence of this same period (that is, with the most fatal of the phases of the historic period), that in which impiety and corruption are carried to a height. In fact, the date of this kind of phase which follows the Deluge is, by its correspondence with 1742 (always employing what has hitherto sufficed us, the approximate value, 518 )

$$
1742-8 \times 518=-2402
$$

Now, the Bible places the Dispersion during the life of Peleg, which extends from -2427 to -2289 , and which indeed includes the date $\mathbf{- 2 4 0 2}$. The middle of Peleg's life, or -2358 , would correspond to 1786 , and that date, evidently still better than 1742, sums up the consequences of a state of profound moral, religious and political disorder.

The formation of nations which follows the dismemberment of Babel, has therefore, as its epoch, precisely an epoch of constitution; this is $\mathbf{- 2 2 7 4}$. It corresponds to that which we ourselves have just passed through.
14. The quincentennial historic period is, not less clearly, bound to all the chronology of the future, as it is contained in the Book of Daniel, and in the Apocalypse;
but as the symbolism of the Pyramid, which reproduces that chronology, determines it by doing away with all ambiguity, and by making known the exact value of Brück's period, the combination of the first two elements of the problem necessarily leads to the immediate examination of the third ; the study of it will piece together the whole of the solution.

## CHAPTER III.

CHRONOLOGY AND SYMBOLISM OF THE GREAT PYRAMID.

## State of the Question.

15. This first paragraph will be devoted to a very brief review of the state of the question at the time when we take it up. Further, this review will be restricted, as far as possible, to those data only, the consideration of which comes into the present work.

The Pyramid is square at the base, and the sides are directed towards the cardinal points; in former times it possessed a casing which gave it the smooth surface of a geometrical solid; this casing has fallen, and the approaches to the monument are strewn with the débris.

The interior comprises a system of passages and chambers (Fig. I.) whose mean vertical plane is meridional, and deviates a little to the east of the median meridional plane of the edifice (the meridional plane of the summit).

The ancients knew of nothing more than the descending passage, ACB, and the subterranean chamber, S .

During an attempt made by Caliph Al Mamoun in 820 , to enter the monument (the entrance $A$ in the northern side having been stopped up), whilst digging a
passage in the mass of masonry, the fall of a stone which sealed the entrance T of the ascending passage, TO (having its opening in the ceiling of the descending passage), revealed the existence of this new passage.

TO leads into the Grand Gallery, ODEFG, which is faced on either side east and west by seven overlappings (see fig. III., the Grand Gallery, Oa ).

The descending passage, the ascending passage and the Grand Gallery are inclined at an angle of $26^{\circ} 18^{\prime}$.

This Grand Gallery, the floor of which terminates to the South by the step of a stair, or the Great Step, FG (Fig. I.) (ABD on Fig. III.) leads out into the chambers H and R , which are called:

H, The Ante-chamber,
R, The King's Chamber.
On the floor of the King's Chamber is placed an open granite coffer, K .

Lastly, above the King's Chamber, there are five Hollows (1, 2, 3, 4, 5, Fig. I. ; see also Fig. III.) called Chambers of Construction. The lowest (No. I) is Davison's Chamber, which is reached by Davison's Passage, EI (having its opening in the upper part E of the Grand Gallery); this chamber and passage bear the name of an English consul, who discovered them in the eighteenth century.

Colonel Howard Vyse discovered the other four chambers in 1837 (whilst digging a lateral gallery in the masonry).

A Horizontal Passage next attracts attention, beginning at point $O$, at the northern extremity of the Grand Gallery, and leading to a chamber M (Fig. I. ; see also Fig. IV.) called the Queen's Chamber ; the axis of this chamber is in the same vertical plane, east and west, with the summit L of the Pyramid and the face FG (Fig. I.), or BA (Fig. IV.), of the Great Step, and we remark here a niche, FZ (Fig. IV.), hollowed in the eastern wall.

Lastly, a conduit, or well, ONP, which starts at O, to the right of the observer who climbs the ascent OG, and comes out at its lower extremity P in the descending passage AB. N is a cavity or grotto situated at the same altitude as the points TC.

The following are some of the remarkable results which the most exact measurements have brought to light concerning the scientific symbolism of the edifice. I shall especially point out those which relate to the great exterior lines; other results, not less decisive, are deduced from the measurements of the chambers and interior passages, but their mention would require too minute a description to find a place here. ${ }^{1}$

The unit of length is either the Pyramid inch, or the Pyramid cubit of 25 inches: that is, respectively, either

[^9]$\frac{1}{500,000,000}$ of the polar diameter of the earth, ${ }^{1}$ or $\frac{1}{10,000,000}$ of the polar radius. Further the Pyramid inch very nearly equals the English inch ; 1 Pyramid inch $=$ roor English inches; and I Pyramid cubit $=25.025$ English inches.

1st. The perimeter of the base in Pyramid inches, divided by 100, equals the number of mean days in the year.

According to this, the length of the side of the base is,
 the measurements vary from 91ro to 9163 English inches, and taking their mean, the result is 9130.4 in Pyramid inches. The most striking verification is afforded by the numbers of M. Flinders Petrie, which give exactly 913I pyramid inches. (See Appendix I.). This relation has been discovered through the almost exact identity of the Pyramid inch and the English inch.

2nd. The height of the Pyramid is the radius of a circumference equal to the perimeter of the square base.

That is to say that the inclination of the sides of the Pyramid to the horizon has for its tangent $\frac{4}{\pi}$, or that this

[^10]inclination equals $51^{\circ} 51^{\prime} 143^{\prime \prime}$. Now, all the determinations of the angle already taken vary from $51^{\circ} 50^{\prime}$ to $51^{\circ} 5^{\prime}$.

The height of the Pyramid corresponding to the angle $51^{\circ} 51^{\prime} 143^{\prime \prime}$, taking the base as $9131^{\circ} 05$ Pyramid inches, is 58 r 3 .or Pyramid inches.

3rd. The base representing the orbit of the earth (according to I), the height, the radius of a circle of the same perimeter, it follows, in the symbolism, that the height must represent the distance of the sun from the earth (the sun, placed at the summit of the Pyramid, the centre of the world, radiates therefore on all the circumference of the terrestrial orbit along the four faces of the Pyramid).

Now, in reality, the distance of the sun from the earth is equal to a Thousand Million Times the height of the Pyramid.

The equatorial radius of the earth is equal to $250,836,007$ Pyramid inches; one value of the radius vector of the orbit, equal to 5813 . $\mathrm{I} \times 1,000,000,000$, gives for the sun's parallax the angle $8.904^{\prime \prime}$, which is included amongst the best determinations of this parallax.

4th. The plane of the base of the Pyramid represents the plane of the ecliptic; the perimeter of the square represents the terrestrial orbit.

The intersection of the equator and of the ecliptic, then, makes the tour of the horizon in the plane of the base
during the length of time occupied by the precession of the equinoxes.

The symbolical representation of the revolution of the equinox by the system of the two diagonals of the square is, therefore, a natural idea. It is also natural that the lengths of the diagonals should represent the duration of that revolution. This is exactly what takes place :-

The sum of the diagonals in Pyramid inches equals in $y$ ears the duration of the revolution of the equinoxes.

This sum equals in reality 25,827 , a number included amongst the best computations (Laplace, 25,816; Bessel 25,868 ; Nyrén, 25,824). (There is no room here to discuss. the variations which the epochs introduce).

5th. The weight of the earth is equal to a thousand million of millions of that of the Pyramid.

The unit of weight is indifferent. Taking as unit the Pyramid ton, ${ }^{1}$ we have, indeed,

$$
\text { Weight of the Earth }=5,273,000,000,000,000,000,000 \text {. }
$$ and

Weight of the Pyramid $=5,273,834$.
6th. Just as the exterior of the Pyramid has special relation to the astronomical movements of the earth, sothe interior (characterised by the central chamber called the King's Chamber, where we find the granite coffer, the-
${ }^{1}$ The weight of a volume of water equal to that of the granite: coffer which is to be found in the King's chamber.
standard of measure) makes known more especially the data relating to the terrestrial globe considered in itself. The weight of the Pyramid has already measured the weight of the earth; its density, given separately by the measurements of the central chamber and of the coffer, is 5.7 ; that is to say, the most exact of the values hitherto deduced from the theory of attraction; the unit of length, the Pyramidal cubit, which is derived from the globe and which serves for all the measurements, is found to be actually given in its true size (by the eccentricity of the axis FZ of the Niche, Fig. IV.), and is no longer solely deduced by calculation.

7 th. The orientation of the passages determines, by an astronomical calculation, the date of the construction of the Monument. It is that at which the meridian of the Pyramid passed at the same time over the polar star $a$ Draconis in the north, and the Pleiades in the south.

This date is $\mathbf{- 2 1 7 0}$, according to the calculation of M. Piazzi Smyth, in 1866, in "Life and Work." The astronomical circumstance just mentioned is remarkable; but it becomes especially so, as indicating an intentional epoch for the construction, by the fact that at the same time that $a$ Draconis and the Pleiades were on the meridian, the equinoctial point was to be found there also ; this cannot occur again before the 26,000 years have passed which complete the revolution of the equinox.

8th. The relation between the metrology of the Great

Pyramid and that of the Bible rests on the following fundamental datum :

The Pyramidal Cubit is not the Egyptian cubit; the latter is only $\frac{4}{5}$ of the former.

The Pyramidal Cubit is found to be none other than the Sacred Cubit of the Hebrews, such as it was determined two centuries ago by Newton.

That being so, relations probably exist between the metric data of the Bible and those of the Pyramid, data which are characterised on both sides by multiples of 5 and 10.

Now, these relations exist ; they are direct and simple. They establish, by the medium of the Pyramid, that the metric data of the Bible, from the Deluge to the construction of the Temple, far from being arbitrary, are founded on a profound knowledge of the constants of terrestrial physics.

We have the following theorems :
The Volume of Noah's Ark is equal to 100,000 times the volume of the granite coffer.

The weight of Noah's Ark is (by the water it draws, Gen., VII., 20), equal to $\frac{1}{100}$ of that of the Pyramid or to $\frac{1}{10^{17}}$ of that of the Earth.

The volume of the ark of the Covenant is equal to that of the coffer.

The volume of the Sea of Brass in Solomon's Temple is equal to fifty times that of the coffer.

9th. Such intimate bonds render probable the supposition, that even the prophetic character of the Bible may be met with again in the Pyramid. Now, if we consider as a diagram, of which the ordinate is a function of time (reckoned on the floor of the passages) the very simple system of the ascending and descending interior passages, traced in a meridional plane, at the rate of one pyramid inch for one year, it symbolises, in a manner, which at first sight agrees with the chronology of the Hebrew text, the Mosaic and Christian dispensations.
The descending passage, AB, (Fig. I.) which leads into the subterranean chamber or sepulchre, S , symbolises the continued fall of humanity, the facilis descensus Averni.
But at T opens the ascending passage, TO, at the epoch of the revelation of the Mosaic Law, the first covenant (Testament) with a chosen people. The chrono'ogical scale ACB becomes ACO. O, the beginning of the Grand Gallery signifies the Covenant of Grace, realised by the birth of Christ. It marks the Christian era on the chronological scale.

The Well PNO, of which the centre of the orifice (in O) coincides then with the Death of the Saviour, symbolises the Way of Salvation for those whom it reclaims from the lower darkness, P , and from final perdition, S .

Let us provisionally admit this first view of the whole. If the succession of passages really forms a chronological
scale, ought not the builder to have marked the date of the construction on this scale by some special characteristic sign ? This objection was made in 1872 . Now, in 1865, M. Piazzi Smyth had observed and described, in his first work, two lines traced with extreme care on the two lateral sides of the descending passage (point V., Fig. I.), facing each other and unlike anything else in the extent of the passage; but not suspecting them at this time of any remarkable signification, he had neglected to note their exact position. In 1872, at his request, but not further apprised of the nature of the object in pursuit, M. Waynman Dixon, an engineer, then occupied by works on the Nile, and Dr. Grant, of Cairo, measured this position exactly. The information being forwarded and the calculation made, ${ }^{1}$ one of the lines gives -2170.4 on the chronological scale, and the other -2170.5 . Now, the date of construction, astronomically calculated six years before, by the passage of $a$ Draconis and the Pleiades, is $\mathbf{- 2 1 7 0}$ (that is, point V., Fig. I, OC + CV $=2170$. According to M. Flinders Petrie's numbers, we should have $\mathrm{OC}+\mathrm{CV}=$ 2173 ; the possible error of the astronomical calculation being allowed for, the difference here is of no importance whatever).

Another proof of the same order has since been added to this very clear numerical verification. When the

[^11]chronological scale, after having ascended the Grand Gallery (Fig. III.), has reached in A the foot of the Great Step, we may suppose either that it continues in the same direction as far as W , that is as far as its intersection with the southern side of the Grand Gallery, or that it outlines the Great Step in ABD, meeting this same southern side in D. In the order of ideas which we are studying, a remarkable event, relating to the Christian dispensation (the dispensation which begins at O ), was expected in W ( $\mathrm{OW}=188 \mathrm{I} \cdot 76$ ), that is to say, in the course of the year 1882. Now, just such an event has undoubtedly taken place; namely, the establishment of English domination in Egypt. Let the reader here beware of too hastily pronouncing a critical judgment.

If the event in question was at first passed over as a mere political accident, it has, by its persistency, acquired an import in ten years' time which stands out conspicuously, and which we may at least describe as the most characteristic feature of a general phenomenon at which we are assisting-the return of civilization towards the prophetic East.

Considered in the light of Brück's law, its importance already strangely increases, since the power which exercises its influence in Egypt is precisely that one which has just constituted itself in order to accomplish its term of power as chief nation ; but it derives a profound significance from a particular fact, of which the present study
will show the reader (from whom we must again require patience and the rejection of all prejudice) the undeniable reality. This fact, in some respect the reason, hitherto hidden, which explains the entire development of history, is, that there exists a relation of descent between the Anglo-Saxons and the Ten Tribes of Israel-those tribes all trace of whom has been lost since shortly after their dispersion ( -758 , according to our literal chronology), and whose destiny, in spite of the numerous researches of which it has been the subject, has remained an historical enigma.

On this point it is worthy of remark, that for about fifteen years a movement of ideas, independent in its origin of all consideration relative to the Pyramid, but essentially founded on the Bible, has arisen in England to avouch the descent in question. That which the historical symbolism and chronology of the ancient Monument, in agreement with the Bible, will put beyond doubt in this work, therefore finds an astonishing verification in the species of revelation previously made to the national conscience of the English people. ${ }^{1}$
${ }^{1}$ On this point, see The Banner of Israel, a Weekly Journal advocating the identity of the British nation with the lost Ten Tribes of Israel: Vol. XIV., 1890, London. Besides, it ought not to be a question of Israel only, since for some considerable time facts even more decisive than those of which the advocates of the Israelite descent have hitherto made use, and which add strength

To sum up, the existence of a chronological scale in the Pyramid has received two numerical verifications, namely -the intentional indication of the date of construction, already previously calculated,-2170; and the actual occurrence, noted beforehand, of a remarkable event, in connection with the Christian dispensation, for the year 1882. It is important to add that the direct indication of a tie between England and Israel has also been observed in the Pyramid. This view rests upon the following facts :
rst. The English inch and the Pyramid inch are practically identical : the second is equal to the first multiplied by 1 .OOI.

2nd. The sides of the Great Step (ABD, Fig. III.; ABX, Fig. IV.), which rests in a manner over the date W (1882) (Fig. III.), are formed by the combination of the Hebrew and English units of measure, namelythe sacred cubit and the yard.

The vertical face BA (Fig. III.) has a height of one yard; the horizontal face BD has a length equal to the sum of the yard and the sacred cubit, and (see Fig. IV.) the prolongation of the ramp $\mathbf{Y}$ of the Grand Gallery marks this
to the latter, have been brought to light to prove the existence among the Anglo-Saxons of a descent from the royal house of Judah. Upon this point, see Glover's very remarkable book, England the Remnant of $\mathcal{F}$ udah and the Israel of Ephraim. By F. R. A. Glover, M.A. 2nd Edition, 1881, London.
subdivision on the horizontal face: we have, in fact, (Fig. IV.), in Pyramid inches, $\mathrm{AB}=36$ (the yard), $\mathrm{BE}=25$ (the cubit), and EX $=36$ (the yard).

The present paragraph sums up the state of the question. Apart from the data which I have just pointed out, everything has yet to be discovered in the chronological and symbolical system of the Pyramid. We know neither the symbolism nor the chronology of all the succession of chambers and upper passages (Ante Chamber, King's Chamber, Chambers of Construction), nor the symbolism, nor the chronology of the horizontal passage and the Queen's Chamber; nor the exact symbolism nor the chronology of the descending passage and the subterranean chamber. ${ }^{1}$ After this, the reader can appreciate the extent of the field which remains to be explored.

Practically, our work will consist of a continued comparison between the Bible and the Pyramid. The historic law will be the key to each, and by it the one will elucidate the other.

In that which concerns the Pyramid, the elements necessary for following out our deductions have just been

[^12]given. In that which relates to the Bible, it is permissible to suppose that the reader is as familiar with it as with general history.
16. Starting from the Christian Era, the comparison between the chronology of the Bible and that of the Pyramid, must be made, first in the past and then in the future.

## CHRONOLOGY OF THE PAST (FUNDAMENTAL FEATURES).

17. According to the literal chronology of the Bible (§ 12 , Table V.) the Deluge took place in 2528 , and the Exodus in 1516. Now, on the chronological scale of the Pyramid, the Entrance of the Descending Passage indicates 2528, or, according to the numbers of M. Flinders Petrie, 2530.95 ; and the intersection of the axis of this passage (Fig. II.) and of the prolonged floor of the Ascending Passage is, according to the numbers of M. Piazzi Smyth,

$$
\frac{1482 \cdot 7+1542.4}{2}=1512.5(\text { year } 1513) ;
$$

according to those of M. Flinders Petrie :

$$
\frac{1485 \cdot 8+1545 \cdot 5}{2}={ }_{1515} 5^{\circ}(\text { the year } 1516) .
$$

First Remark.-According to these numbers, there can be no further hesitation as to the choice between the two possible hypotheses relative to the signification of the
entrance of the descending passage. It is the Deluge, and not the Dispersion of the Nations, that it indicates. Thus the chronology of the Pyramid comprehends the whole history of postdiluvian humanity.

Second Remark.-The sojourn of Moses in the Desert begins (Fig. II.) in $\mathrm{B}_{d}$, ten years before A, and ends in $\mathrm{B}^{\prime}$, ten years after A'. The "Sinai" in the Bible has for its epoch exactly the middle of this sojourn of Moses in the desert.

In the Pyramid $\mathrm{B}_{6} \mathrm{SB}^{\prime}$ ( or $\mathrm{BSB}^{\prime}, \mathrm{AB}=\mathrm{AB}_{6}$ ), is centred on $\mathrm{AA}^{\prime}$, and forms system with this very characteristic line.

Moses is at first in the desert during $\mathrm{BA}+\mathrm{AS}$; afterwards the whole people is in the desert during $\mathrm{SA}^{\prime}+\mathrm{A}^{\prime} \mathrm{B}^{\prime}$. Moses has 50 years in A; $100+10$ in $\mathrm{A}^{\prime}$.

Third Remark.-A general observation concerning the harmony of the numbers.

The number given by M. Flinders Petrie for the Exodus is exactly in harmony with the Bible; that of M. Piazzi Smyth differs by 3 units. Further on we shall superabundantly verify that the first number harmonises best with the whole of the mensurations. But that we may appreciate the value of such coincidences, it is important to define clearly the scientific point of view of the question.

The chronology of the Bible has been established to the letter, that is to say, by purely and simply adding up the intervals of time which it indicates. It is the natural
and direct method; it constitutes the first solution to be adopted in a methodical procedure. But this solution involves an element of uncertainty :

1st. Because Biblical chronology in its computations generally proceeds by whole numbers of years.

2nd. Because, consequently, we cannot immediately decide whether two consecutive lapses of time have or have not one common year.

Therefore, not because the indications are inexact, but because they are not always sufficient, we know, a priori that the dates of Biblical chronology, obtained by the first solution are not necessarily of mathematical exactitude. Here, as in all scientific study, it is when the first solution has made evident a law of phenomenon, that this law, then known, will serve to determine the terms of correction of that first solution; that is, in the case in point, that it will make known the fractions of years which we have neglected, or the errors in the superposition of the ends and beginnings of the different periods.

The latter is a problem of secondary consideration. For the present, we must put in operation the first solution; now we shall see that it serves as a striking proof of the admirable exactitude of Biblical chronology; for, even with this rudimentary method of adding whole numbers of years, the uncertain parts of the beginnings and the ends of the periods only comprehend, in spaces of several thousands of years, 1,2 or 3 units at the most.

We may also observe here that the Bible makes use of several units of time of different orders; time, month, day, etc., as though to bend precision to the nature of the objects. We do not measure the distance between two towns to a millimetre; we give it in leagues, and although mathematically inexact, it is correct in leagues. In the same way in reckoning thousands of years, 3,001 years count as 3 ; that is mathematically inexact, but correct in thousands of years, which is right according to the measure. Besides, the exactitude of our verifications will be such that it was scarcely necessary to remark upon all this.

Amongst the fundamental features of the chronology of the past, it would be as well, perhaps, to mention again specially the date of the dispersion of the Ten Tribes of Israel ; but as I shall have to speak of it in studying the Queen's Chamber, with which this event is closely related, and as that study refers to the chronology of the future, I shall immediately approach this second part of my subject.

## CHRONOLOGY OF THE FUTURE.

(a) Brïck's Law Symbolised. The King's Chamber.
18. The Grand Gallery (Fig. III.) leads from its northern extremity, O, as far as the foot, A, of the Greaz

Step, $\mathrm{ABD}, \mathrm{A}$ being distant from $\mathrm{O} 18 \mathrm{r} 3^{\prime 7}$; then follow, on the horizontal floor BT :

The First Low Passage, DF.
The Antechamber, FK.
The Second Low Passage, KP.
Lastly, the King's Chamber, PT, at the further end of which the chronological scale OABDT stops.

In conformity with what has been previously said, if the Pyramid symbolises the astronomical movements of the earth by its exterior characteristics, the King's Chamber recapitulates the science of the Earth, derived from itself as an organised whole, that is to say, the physics of the globe.
19. In the same way that the horizontal diagonals of the base of the pyramid represented, expressing it by its duration, the movement of the revolution of the equator, or the precession of the equinoxes, so the diagonals of the King's Chamber represent and express by its duration, the movement round the axis of the poles of the quincentennial meridian ${ }^{1}$ of Brück's period.

One diagonal of the King's Chamber is equal to Brïck's quincentennial period.

[^13]The sum of the two diagonals equals the length of the life of a nation.

In fact, we have:
Diagonal of the King's Chamber $=515^{\prime} 165$.
Sum of the diagonals $=1030.330$.
(Brück's numbers were 516 and io32).
Moreover, the rectangular floor of the Chamber may be divided into two identical rectangles, whose perimeters (which express perfectly well rotations or revolutions round the vertical axis) are each equal to

$$
2\left(412.132+103^{\circ} 033\right)=2 \times 5^{1} 5^{\circ} 165=1030^{\circ} 33 .
$$

Remark.-As regards the fraction which accompanies the number 515 , it is not without interest to notice that, in chronological usage, as the year zero does not exist, the presence of this fraction leads us to ascribe, with Brück, to the year 516, an event which occurred 515.165 after the era of the period. The symbolism, therefore, implies both the lapse of time 515.165 , and the term of 516 years, which is taken in the ordinary use of the chronological computation.
20. The movement of the meridian of precession is figurated in the most remarkable manner by a relative raising of 5 inches of the floor which supports the system of the two diagonals; the sides of the King's Chamber are formed of 5 horizontal courses of granite (represented
in Fig. III.) of equal size vertically ; but the lowest course descends 5 inches below the floor of the chamber (as is indicated in TT').

This relative raising of the floor very well represents a cause, of which the effect is to displace the starting point of the periodic undulation which is symbolised by the two diagonals.

The time that the quincentennial meridian takes to return to the meridian of precession is equal to 515.165 , augmented by the displacement of 5 inches in precession, that is to say, equal to $520 \cdot 165$.

This is the interval between the apogees of the successive chief nations, which was fixed by Brück at 520 years.

Remark-What has been previously said (§ 19, Remark) on the subject of the number 515165 , a number which, in chronological usage leads us to reckon the year 516 , must be repeated here. The number 520.165 introduces the consideration of a chronological period of 521 years.
21. Not only the five phases of the quincentennial period are symbolised, as we shall see, but they are found, on the chronological scale of the Pyramid, precisely at the cpochs determined by Bruck.

According to Brück, the present epoch, an epoch of constitution, begins the quincentennial period of England
as chief nation, and the date 1870 has presented itself to us as characteristic of the establishment of the new state of political equilibrium.

Now, the Great Step, ABD (Fig. III.), which we have already recognized as relating in a symbolical manner to England (by its dimensions), occupies at first sight precisely the present epoch; moreover, nothing could better symbolise a constitution than a socle such as this Great Step. It begins the horizontal floor BT, and this floor, which crowns the succession of passages (see Fig. I.), represents the period of domination of Great Britain as the chief nation. We must evidently take its centre of gravity G as the central point of the socle of constitution, ABD . Now, $G$ is projected on the chronological scale in C, that is to say, in

$$
{ }^{18} 1_{3} \cdot 7+3^{6}+\frac{61}{3}=1870 \cdot 033
$$

The extremity T of the King's Chamber is at a distance equal to 2385.726 from the commencement, O , of the Grand Gallery.

The horizontal distance from G to T is therefore :

$$
2385^{\prime} 726-1870 \cdot 033=515 \cdot 693 ;
$$

that is to say one of Brück's historic periods, or one diagonal of the King's Chamber.

But the floor BT is divided into five distinct parts, I., II., III., IV., V., or BD, DF, FK, KP, PT, whose
centres G, E, H, M, R are at the distances (from the starting point O ):

| G | E | H | M | R |
| :---: | :---: | :---: | :---: | :---: |
| 1870.033 | 1936.950 | $2021 \cdot 33$ | $2129^{\circ} 56$ | $2282^{\circ} 693$ |

The first of these dates, $1870^{\circ} 033$, is the known epoch of constitution.

By subtracting from $\mathrm{E}, \mathrm{H}, \mathrm{M}, \mathrm{R}$ a period of 520.165 , in order to find the analogous periods of the preceding chief nation (France), we get :

$$
1416 \cdot 785 \quad 1501 \cdot 165 \quad 1609 \cdot 395 \quad 1762 \cdot 528
$$

Now, these are the four epochs of preorganisation, organisation, apogee and decadence of this preceding chief nation.

From this it results that the Great Step, I., the First Passage, II., the Ante Chamber, III., the Second Passage, IV. and the King's Chamber, V., indicate the five phases of the historic period.
(We shall see further on, that the fact that the King's Chamber coincides with an epoch of decadence and corruption is one of the most remarkable features of the symbolism.)

Examined thoroughly, the facts become still more precise. The dates 1501, 1609, historically commence the phases of organisation and apogee. Brück gives for these commencements 1509 and 1610 . We may, therefore, sup-
pose that the quarters $\mathrm{HI}, \mathrm{MN}$ of the spaces $\mathrm{FK}, \mathrm{KP}$ represent the lapses of time which serve to lead the power of these phases to its maximum. But this has a verification, for, if the supposition is true, as the Deluge, -2528 , is, as we have seen, the critical date of an apogee, it is necessary that there should be from N to the Deluge, or to the entrance, -2528 to -2531 of the Descending Passage, an entire number of periods of $520 \cdot 165$.

N marks:

$$
2129^{\circ} 56+25^{\circ} \cdot 5=2154^{\circ} 6 \mathrm{I} .
$$

Now, in fact,

$$
2154 \cdot 61-9 \times 520 \cdot 165=-2527 .
$$

Then the series of numbers given by the Pyramid to characterise the different phases of the period becomes-

$$
1416.785^{1} \quad 1530.230 \quad 1634^{\circ} 445 \quad 1762.528 \quad 1870.033 .
$$

The dates submitted by Brück in L'Humanité were-

$$
\begin{array}{lllll}
1421 & 1525 & 1631 & 1783 & 1860^{2}
\end{array}
$$


#### Abstract

${ }^{1}$ Brück considers the Councils of Constance and Basle as characteristic of this epoch of preorganisation. The Council of Constance ( $1414-1418$ ) has for its centre, 1416 ; that of Basle begins in 143I; that is to say, in connection with what precedes, with the third quarter of the epoch of preorganisation, which is 1430; its centre $\frac{1213+143}{2}=1437$ (corresponding to point $Z$ ) is twenty years from the central date given by the Pyramid. ${ }^{2}$ Brück wrote between 1860 and 1864 (Humanité, Vol. I, p. 386). We are in the middle of an epoch of the reconstitution of


22. The construction of the Pyramid, like all great facts of inspiration, belongs to the epoch of organisation; it is here given by the first quarter, point J, of the Antechamber; in fact,

$$
\mathrm{J}=1963^{\prime 2}+29^{\circ} \cdot 665=1992 \cdot 265
$$

and

$$
1992 \cdot 265-8 \times 520 \cdot 165=-2169 \cdot 055
$$

say the beginning of the year -2170, which year has already been calculated astronomically and is explicitly commemorated ( $\$ 15,9$ ) on the chronological scale of the Pyramid.

The point $S$, which terminates the quarter RS, placed beyond R, exactly corresponds to A, 1813.7 at the foot of the Great Step.

This foot of the Great Step belongs to the preceding period, and thus limits the third quarter of its phase of decadence ; we have, in fact :

$$
S=2282 \cdot 693+5 \cdot 5165=2334 \cdot 2095
$$

and

$$
2334 \cdot 2095-520^{\prime} 165=1814 \cdot 04\left(1813^{\prime} 7\right) .
$$

Europe. This work was commenced at the beginning of the central quadriennial period of the epoch (1860), and it will become visible, perhaps, at the end of this period (1864). In twelve years the new Europe ought to be founded or constituted." $1860+12=$ 1872.
23. In summing up, we see that the period of Great Britain terminates the history of humanity begun at the Deluge. This history consists of a succession of ten powers or chief nations, of whom the first nine (the last, which begins to-day, will come to an end like the others, Dan. XI., 45) have successively fallen. These powers, together with the indication of the spiritual movement of the brilliant phases of their period, are :
I. Noachians . . . . $\left\{\begin{array}{l}\text { Noah; } \\ \text { Shem. }\end{array}\right.$
2. Assyrians (rst Egyptian empire) $\left\{\begin{array}{l}\text { Abraham; } \\ \text { Jacob. }\end{array}\right.$
3. Egyptians . . . • • $\left\{\begin{array}{l}\text { Moses ; } \\ \text { Joshua. }\end{array}\right.$
4. Jews-Israelites, Phœnicians $\cdot\left\{\begin{array}{l}\text { Samuel, David; } \\ \text { Solomon. }\end{array}\right.$
5. Greeks . . . . . $\left\{\begin{array}{l}\text { Pythagoras (Daniel) ; } \\ \text { Socrates. }\end{array}\right.$
6. Romans . . . . . $\left\{\begin{array}{l}\text { John the Baptist ; } \\ \text { Saint John. }\end{array}\right.$
7. Franks • • • • $\}$ Middle Ages.
8. The Papacy
$\left\{\begin{array}{l}\text { (Luther) Calvin; } \\ \text { Descartes, Fascal. }\end{array}\right.$
10. Great Britain • • $\cdot\left\{\begin{array}{l}\text { ? }\end{array}\right.$
(b) Queen's Chamber. The Reformation and the Anglo-Saxons.
24. The vertical axis of the Chamber is in the median east-to-west plane of the Pyramid, that is, in the east-towest plane which contains the summit of the Pyramid; with this plane coincides also the face AB of the Great Step (Fig. IV.) where England's present period begins. From this we conclude that this Chamber and this Great Step symbolise a fundamental event in the history of humanity.
25. The Great Step and the Queen's Chamber, both determined by this median plane of the edifice, have, in addition, a specific common element, the sacred cubit of the Hebrews. The axis FZ of the Niche, distant from the axis TN of the Chamber by an interval exactly equal to a cubit, will fix the length of the cubit BE on the upper face XB of the Great Step, at the point E where the prolonged ramp YE cuts BX. (EX and BA are therefore each equal to the present English yard.)
26. The Great Step, of which the length BX, where the horizontal floor of the English period begins, is equal to the sum of the Hebrew cubit and the English yard (sub-divided into these two units by point E), indicates clearly that this period concerns both Israel and England.
27. The Niche in the Queen's Chamber indicates not less clearly, by its eccentricity of one cubit, that the Dispensation to which this Chamber belongs concerns the Israelites.
[This last supposition accords with the division by 7 (see §33) of the distance $\mathrm{OM}^{\prime}$, which is the length of the horizontal passage leading to the Chamber.

This characteristic number 7 is reproduced by the length of the line DO which hides the entrance of the passage (from the indications the passage must originally have been sealed with a stone). If to DO, calculated by the aid of $\mathrm{OF}=217 \cdot 8$ and of the angle $\mathrm{DOF}=26^{\circ} 18^{\prime}$, we add $10 \times 10$ or 100 , we obtain as the result $7 \times 7 \times 7$.

We have also $\mathrm{DO}=3 \times 3 \times 3 \times 3 \times 3$ and $\mathrm{D}^{\prime} \mathrm{O}=3 \times 5 \times 7$. Further on we shall see (§85) the remarkable significance of this disposition].

But other characteristics prove that the horizontal passage and the Queen's Chamber also refer to the AngloSaxons.

First, let us note that the last quincentennial historic period is clearly marked out according to its phases on the horizontal chronological scale of this passage.

The Small Step KL at 1303.3 (P. S.) or 1305.7 (Fl. P.), say 1304.5; the Entrance HM at 1519.4 (P. S.) or 1522.83 (Fl. Petrie), say 1521.115 ; lastly the central axis NT, at $1622^{\prime} \mathrm{I}$ (P. S.) or 1624.9 (Fl. P.), say $1623^{\circ} 5$-or better, by applying the geometrical propriety that the
axis of the Chamber passes through the vertical side of the Great Step, and by calculating the distance from NT to $O$ through $A O=1813.7$ and $A O N^{\prime}=26^{\circ} 18^{\prime} 10^{\prime \prime}$, $1625^{\circ} 9$-indicate respectively the epochs of constitution, organisation and apogee of the period.

According to this condition that the distances $\mathrm{M}^{\prime}$ and $P^{\prime}$ have for their mean $1625^{\circ} 9$, and for their difference the width measured $\mathrm{P}^{\prime} \mathrm{M}^{\prime}=205^{\circ} 7225$ (the mean of $205^{\circ} 8 \mathrm{P}$. S., and $205^{\circ} 645 \mathrm{Fl}$. P.), we obtain for $\mathrm{M}^{\prime}{ }^{1} 523^{\circ} 04$, and for $\mathrm{P}^{\prime}$ 1728.76 ; besides we had already $\mathrm{P}^{\prime}=1725$ (P. S.) and 17277 ( $\mathrm{Fl} . \mathrm{P}$ ). The mean of the three values gives $\mathrm{P}^{\prime}=1727$.
28. But here is the most interesting characteristic. The epoch of constitution which begins the period and also its epochs of organisation and of apogee have just been recognised. We may ask ourselves where and how will the epoch of constitution be indicated which terminates this period and begins the next-that of England. The horizontal scale stops at the southern wall of the chamber towards 1727 (§27). But the observer, having reached the vertical axis of the chamber, which is also the axis of the entire monument, naturally looks towards the roof of the vault in the direction which is indicated by the rise RTR', and towards the Great Step of constitution AB of which the centre of gravity is 1870 .

In this direction, the scale NT, which rises towards the ridge of the vault from the feet of the observer, terminates at this ridge ; its length is 244.4 (P. S.) or 244.855 (Fl. P.), say 244.627.

Now

$$
1625^{\circ} 9 \text { (centre) }+244^{\circ} 6=1870 \cdot 5 .
$$

Thus T , at the extreme end of the scale to which the change of direction towards the Great Step leads, exactly reproduces the fundamental date of constitution which this step symbolises.
(We may remark that KL being equal to $2 \mathrm{I} \cdot 16$ (P. S.) or ${ }_{20}^{19 \cdot 188)}$ (Fl. Petrie), say 20.3 , that is, equal to BC (the Great Step), if we rectify the bend OKLN, the axis TN will pass exactly through the centre of gravity $G$ of this Great Step.)
29. All this indicates in the clearest manner that the dispensation which commences in ( $\mathrm{ABX}, \mathrm{G}$ ) is the continuation of that with which the Queen's Chamber is concerned.

By examining the preceding numbers more closely, we recognise that this last dispensation is none other than the Reformation. In the first place, it has a religious character, since it emanates from $O$, the commencement of the Christian era. The variation of the level KL, therefore, probably indicates a variation of the spiritual level. Now, if to $\mathrm{K}=\mathrm{I} 304^{\circ} 5$, we add $\mathrm{KL}=20^{\circ} \mathbf{3}$, which leads to point

I, thus determining the level LP, we obtain 1324.8 that is to say, the birth of Wiclif (1324) the founder of the Reformation. The middle of Wiclif's life, namely, $\frac{1924+1394}{2}=1354$, falls exactly one quincentennial period from the present period of constitution 1870 ; $1354+515.165=$ 1869.165.

M or $\mathrm{M}^{\prime}=152 \mathrm{I} \cdot 1 \mathrm{I} 5$ to 1523.04 is a number which speaks for itself. It signalises the time when the Evangelical Church assumes a life of its own, by publicly and openly breaking with Rome, who condemns it. In 1520, the great organiser, Luther, burns the Pope's Bull; and the Pope anathematises him and his adherents in 1521, the very year of the translation of the Bible at Wartburg.

N or $\mathrm{N}^{\prime}=1625^{\circ} 9$ explains by its importance the central position of the Chamber in the Pyramid, for it is the central date of the foundation in America of New England by the free colonies of the Puritans. Three colonies were founded in 1620,1627 and 1630 , dates of which the mean, $1625^{\circ} 7$ reproduces the preceding number. The first of all, the free Puritan colony of 1620 , the initiator and founder, is indicated by the line $i l$ which precedes IN ;

$$
\mathrm{Ii}=5^{\circ} 65 \text { and } 1625^{\circ} 9-5^{\circ} 65=1620 \cdot 25 .
$$

Lastly, the change of direction NT leads to T; and this point, like G, represents the present constitution, 1870, that of the chief nation which characterises most vigorously the consequences of the reforming movement.
30. To sum up, the horizontal passage and the Queen's Chamber are the history of a Christian dispensation; this dispensation is the Reformation among the Anglo-Saxons, and the expansion of Christianity throughout the world under their influence (this expansion is characterised by the important fact of the foundation by the Puritans of New England, the origin of the United States). ${ }^{1}$
31. This being determined, a final problem presents itself.

The passage and the chamber ONT (Fig. IV.) are
${ }_{1}$ The Niche is to be found in the further half of the Chamber, across which the horizontal chronological scale is prolonged. This niche which, by its axis, gives the fundamental scientific standard for the whole edifice, seems to be, at the same time, a demonstration and a memorial of this double truth: rst, That the rational spirit of research in modern science is a product of the Gospel. 2nd, That the science of the external world is, in the divine plan, the means of a more vivid comprehension of spiritual truth. At the summit of this memorial, and as its crown, is symbolised the life of that man of genius, the glory of the English people, who first made known the dimension of the sacred cubit. From the highest lateral side, $a$, of the niche to the south wall, $a^{\prime}$, of the Chamber there is a distance equal to the life of Newton, and which, by the dates of his birth and death, represents this life. $a=1641$ and $a^{\prime}=1727$. Such details belong to the subject, not for themselves, which would be puerile no doubt, but for the order of ideas which they characterise. The Chamber extends, in the horizontal chronological sense, in such a manner as to comprehend, besides the religious movement properly so-called the scientific movement, which is bound up with it.
immediately continued by the floor GT (Fig. III.). The first of these two systems, as well as the second, concerns the Anglo-Saxons; but why are they at once united, and yet separated in the symbolism ?

Between the two, indeed, there is a difference; GT is essentially conspicuous and appears in the natural succession of the chronological scale OA (Fig. III.); the passage ONT (Fig. IV.), on the contrary, is hidden in the Pyramid's wilderness of stone ; it was destined to remain long unknown to those who trod under their feet the floor SOA, for the stone DFO concealed the entrance of it, and in this floor there was no break of continuity. The two blocks DIA, DFO, or, what comes to the same thing, the two similar stones $\mathrm{D}^{\prime} \mathrm{IA}, \mathrm{OF}^{\prime} \mathrm{D}^{\prime}$ concealed the passage, prolonged as far as the fundamental axis BAIN where the change of direction towards $C$ is revealed ; and thus the perimeter IAD'O was, in a manner, the veil which masked this hidden conduit.

Let us raise this veil of which the length measures the duration of the mystery, and stretch it upon the chronological scale, starting from the extremity A, 1813\%, at the foot of the Great Step of constitution.

We have, from $\mathrm{OA}=1813.7$ and $\mathrm{N}^{\prime} \mathrm{OA}=26^{\circ} 18^{\prime} 10^{\prime \prime}$, $\mathrm{AN}^{\prime}=803.68$; whence $\mathrm{AI}=803.68-46.34=757.34$. In consequence, the duration sought is $1813.7+757.34=$ $2571^{\circ} 04$, and its era is -75734 , say the year -758 . (Point W.)

Now this date-758, according to the chronology of the Bible (§ 12 , table V.), is exactly that of the dispersion of the Ten Tribes of Israel, and as the Pyramid indicates, they have actually, since then, disappeared from the arena of the world.
32. The race which is the subject of the dispensation of the Queen's Chamber, the Antechamber and the King's Chamber successively, is therefore Israel.

But we have shown that this race is also the AngloSaxon race.

Therefore, according to the Pyramid, the Anglo-Saxons are none other than the descendants of the scattered Ten Tribes of the house of Israel.
33. A fact of such immense importance, if it is exact, merited a second demonstration. This exists. It had long been remarked that the spaces $\mathrm{OF}^{\prime}$, LM (Fig. IV.) are each very nearly $\frac{1}{7}$ of the length $\mathrm{OM}^{\prime}$. The division of $\mathrm{OM}^{\prime}$ by 7 is, therefore, clearly indicated; this forms a week of 7 equal intervals of time; if now we recall the well-known method in the Bible of counting by periods of $3 \frac{1}{2}$ times, days, etc., and if we take the half of $\mathrm{OM}^{\prime}$, we obtain for the corresponding interval of time, to which the Bible, according to what has just been said, a priori attracts attention, 760.557 to 761.52 , that is to
say, within a very little of the date of the Dispersion. We might already consider this result remarkable; but the small correction is indicated by the Pyramid itself. Just as the bend OKL being rectified, caused the axis TN to pass exactly through the centre of gravity $G$ of $A B X$, thus establishing perfect chronological continuity, since $T=1870$ and $G=1870$, so the necessary displacement of the axis TN is indicated by the eccentricity $\mathrm{I} i$ of the line $i l$ of the Niche, of which the axis $Z E$ is fixed $(B E=r$ cubit).

Now, this eccentricity being 5.65 (of which the half is 2.825 ), the corrected values of the duration sought become 757.73 to $758 \%$, that is, the same as the previous date, 758.

Lastly, as though to seal yet more indubitably the fact that it closely concerns the Israelites, the entire period of 7 times, of which 758 is the half, or $3 \frac{1}{2}$ times, being marked on the chronological scale in OS, indicates exactly the Coming out of Egypt of the Bible ( -1516 ), because $2 \times 758=1516$.

The Dispersion of the Ten Tribes therefore took place midway between the giving of the Law at Sinai and the Birth of Christ ( $\mathrm{OW}=\mathrm{WS}$ ).

We may remark in passing that the commencement of the Captivity of the Jews, -606 , has also a simple reference to the date of Sinai.

The Dispersion of Israel gives, as we have just seen
$758=\frac{s}{10} \times 1516$; the Captivity of Judah gives $606=$ $\frac{4}{10} \times 1516$.

The date of Sinai is also connected in a simple manner with that of the preaching of the Saviour. From the Law to the Gospel there are three of Brück's periods; for $30+1516=1546$ and $3 \times 515.165=1545.495$. This is the length of time which separates the brilliant phase of the Egyptians from that of the Romans.

Again it follows that the division by 7 of the distance $\mathrm{OM}^{\prime}$, a division which was long ago established at first sight $\left[\mathrm{OF}^{\prime}(=217.8)\right.$ and $\mathrm{KM}^{\prime}(=216 . \mathrm{I}$ to 217.1$)$ are the ist and 7th approximate terms] has for its set purpose to make the seventh part of the distance OS conspicuous, that is to say, $\frac{11927}{9}=216.1$ to $\frac{12187}{7}=216.5$ (§ 17), of which the whole part 216 is equal to $6 \times 6 \times 6$. We shall make use of this observation further on (§85).

## (c) Prophecy.

34. The Prophecies of the Bible with which we are concerned in this study, and of which we have to point out the harmony with the Great Pyramid and with Brück's law, are those which can be interpreted by numbers; in this respect we must particularly examine the Book of Daniel, and the Apocalypse, or Revelation of St. John.
(a) Book of Daniel.
35. This prophecy, from one end of the book to the other, goes on extending further and further into the future, till it attains, in Chap. XII., the final end of humanity.
36. We find first, Chap. VII., 12 , an indication of the computed duration of the life of the nations, which is two times; ${ }^{1}$ whence we conclude, since Brück's law assigns to the nations a life of two quincentennial periods, which is symbolised in the Pyramid by the sum of two equal diagonals of the King's chamber, that this term of time, which occurs so often in Daniel and the Apocalypse, expresses nothing else than Brück's historic period.

Having made this important observation, we may further remark, as to the exact numerical value of the lapse of time corresponding, that, according to results previously obtained, this value is:

Ist. $515^{\prime} 165$, or one diagonal of the King's Chamber, if it concerns the succession of phases which affect the same meridian ;

2nd. $520 \cdot 165$, if it is a question of different meridians, that is to say, of the succession of phases which affect the

[^14]movable meridian drawn by the movement of historic precession ;

3 rd. 516 and 52 I , by extension, if in accordance with the remarks made at the end of $\S \$ 19,20$, we apply theordinary chronological computation, in virtue of which $515 \cdot 165$ and 520.165 allow us to reckon historically the year 516 and the year 52 .
37. Chapter VIII. contains a prophecy ( $1-14$ ), and its explanation ( $15-25$ ), relative to the Medes, Persians, and Greeks, lastly (in the immediate sense) to the persecution of Antiochus Epiphanes, who profaned the Temple and entered into the sanctuary (11, 12, 13), in -168 . The 2,300 years of verse 14 , which follow, and "after these the Sanctuary shall be purified," bring us to:

$$
-167+2300=2133 .
$$

The year which follows this interval of time is 2134.
Now, point a (Fig III.), situated at 5 inches from M, and at 45 from P , marks 2134.56 .
38. Chapter IX. contains the celebrated prophecy of the 70 weeks. I shall refer to this later.
39. Chapter XII. (the continuation of Chapter XI., which brings us to the last times) contains the known. numbers $3 \frac{1}{2}$ times (verse 7), 1290 and 1335 years (II, 12).

The $3 \frac{1}{2}$ times, according to $\S 36$, would be, reckoning the value of time allowed to the same people upon the same meridian,

$$
5^{1} 5^{\cdot} 165 \times 3 \frac{1}{2}=1803^{\circ} 0775
$$

and their limit ( $a$, Fig. III.) is the same as that of the 2300 years of Antiochus Epiphanes.

Now,

$$
2133-1803=330,
$$

and 330 is the celebrated date at which Constantine having decapitated the Empire, the Bishop of Rome virtually takes possession of the city (this is one of Brück's epochs of constitution). The 7 times, of which the consideration is implied in that of the $3 \frac{1}{2}$ times, which is the half of it, would point to another characteristic event, namely, the entrance into the Promised Land. (See § 100, A).
(We shall see, in studying chapter IX., that this explanation of the $3 \frac{1}{2}$ times is correct, but that it is not complete.)

As to the 1290 years, it follows naturally from Chap. XII., $6,7,11,12$, that they have the same limit as the $3 \frac{1}{2}$ times. Now, 2133-1290=843, the date of the Treaty of Verdun. This treaty, distant from the epoch 330 by one quincentennial period, divides the empire of Charlemagne and puts Europe into the hands of the Papacy.

330 and 843 are the two phases of a single fact. 330 causes "to cease the sacrifice and the oblation;" in 843 ,
the "abomination" (the idol) is itself in the Sanctuary (Dan. IX., 27, and XII., II).

The 1335 years bring us to $2133+45=2178$. This is the entrance $P$ (Fig. III.) 2179.66 into the King's Chamber.
> "Blessed is he that waiteth, and cometh to the 1335 days" (XII., 12).

According to this, the two characteristic points $a$ and $P$ (Fig. III.), that is to say, 2134.56 and 2179.66 , are the two limits of the periods of Daniel, and their beginnings are
-r68 (Antiochus),
330 (Abandonment of Rome and virtual change of power; Constantinople founded.
The centre of the reign of Constantine as sole master of the Empire, or $\frac{323+287}{2}$, is also 330 .)
and

$$
843 \text { (Treaty of Verdun). }
$$

$a$ and P belong to the same system and comprehend Daniel's 45 years, the difference between 1335 and 1290 ; further, M, the middle of the second low passage (Fig. III.) distant from P 50 units, belongs to the same system as $a$; for just as a corresponds to the political constitution of 330 , M corresponds to the spiritual constitution of 325 (Council of Nicea) which preceded the first by five years ( $\mathrm{Ma}=5$ ). The remainder of our study will confirm these first data.
( $\beta$ ) Apocalypse; or, Revelation of St. Fohn.
40. Chapters I. to III. contain, in the Letters to the Seven Churches, the spiritual history of the Church. We can only interpret them later.
41. Chapters VI. to $X X$., which contain revelations relative to the history of humanity, from the Deluge, as will be shown, to the last Judgment, form the body of the work; this is the part which must first occupy us.

These revelations are of two kinds, and are contained in two Books:

Those relating to history properly so-called, in the Sealed Book (V., I) ;

Those relating to the individual history of the Church, in the Little Book (X., 2).
42. The Sealed Book. This, from the external facts, is the history of humanity. The epochs or periods are represented by 7 seals, 7 trumpets and 7 vials. The 7 trumpets are comprised in the 7 th seal, and the 7 vials in the 7th trumpet (cf. XI., 15, 18, 19; XV., 1, 5, 6; XVI., 18, 21). By this, it is clearly indicated that this imagery represents a series of successive historical events and not, as some assert, the same events under different forms.
43. The Little Book. This is the history of the Church, whether in that which concerns Israel (XI.), or in that which concerns the Church properly so-called (XII.XV.).

It is introduced at chapter X ., after the 6th trumpet and before the 7 th, which means that the revelations contained in the Little Book will be known only at an historic period subsequent to the event which the 6th trumpet announces in the Sealed Book, and before that of the 7 th. But elsewhere, these revelations concerning the Church, relate, for the most part, to events which precede the 6th trumpet.

In the Little Book are related both these events and those which follow, up to the point where it joins the Sealed Book, that is to say, the 7 th trumpet.
44. We shall subsequently develop this plan of the Apocalypse in greater detail. For the present, we must seek in the Pyramid for the great traits of symbolism which correspond.
45. Without delaying more than a moment to remark that the Grand Gallery (which begins, we shall see, with the period of trumpets) recalls, by its seven overlappings, the septenary subdivision of all prophecy, we will proceed to solve the following fundamental problem:

At what epoch does the Church begin to have a full consciousness and knowledge of its history? That is to say, when is the Little Book, which explains the destiny of the Church and exhibits its history, presented to it ?

The two figures which correspond to the 5th and 6th trumpet, that is, to the two first woes, represent respectively, as is known, the power of the Arabs and that of the Turks.

The first menaced Europe from the eighth to the ninth century; the second, from the fourteenth to the fifteenth. These two first woes then fall, calculating roughly, about the time of the two epochs of constitution :

$$
830=1870-2 \times 520
$$

and

$$
135^{\circ}=1870-520
$$

(1360, taking of Adrianople), which correspond to 1870.
The introduction of the Little Book does not, then, take place before the fourteenth century, that is, it appears after the quincentennial period of the domination of the Papacy as chief nation. It seems to be preparing during the following period, that of the Reformation, which begins in the fourteenth century (Wiclif, 1324-1384; middle of Wiclif's life, 1354) and has just ended (1870). (Let us recall, with regard to this, that from the middle of Wiclif's life to the centre G (Fig. III.) of the Great Step of constitution, there is exactly one of Brück's periods relative to the same meridian ; for $1870-1354=516$ ).
46. During this period, the comprehension of prophecy has been constantly increasing, and at the present day, light is thrown upon it from all sides.

The first utterance of Brück's law, one of the principal elements of the solution, was published by him in 185 I , that is at the date marked by the angle B of the Great Step (1850).

The measurement of the Pyramid, by M. Piazzi Smyth, was completed (April, 1865), at the same time that Brück finished writing the complete exposition of his law (27th July, 1865), five years from the fundamental date $1870 .{ }^{1}$

Thus, everything was so arranged that at this date all the documents for the study of prophecy might be ready.

What is no less characteristic as a demonstration of

[^15]fact, is the return of Israel (Great Britain), to the East. The year 1882 (1881 76 , Point W, Fig. III.), even now is historic.

From all this we must conclude that the epoch of constitution ABDW (Fig. III.) of the Great Step is precisely that of Chapter X., where the Little Book comes in.
47. Now, when the Angel presents himself with this Book, 7 thunders utter their voices (X., 3), like the threatenings of a distant storm ; these threatenings are symbolised by the 7 ledges from D to $a$ (Fig. III.), impending above the entrance of the first low passage DF. Then a voice "from Heaven" (X., 5), forbids the prophet to write what he has heard, as if it concerned a particular order of spiritual dispensations (the 7 thunders do not enter into the systematic succession of the 7 seals, 7 trumpets and 7 vials) which must remain hidden from men ; ${ }^{1}$ but, at the same time, the Angel lifts his hand "towards Heaven" (X., 5) [this is symbolised in the Pyramid, by the attention being drawn in the vertical direction, towards $a$ (Fig. III.)], and declares that in the days of the 7 th trumpet "the mystery of God should be finished " (X., 7). It is as if he were directing us to search in the vertical direction for the epoch which corresponds to point $a$, the limit of the 7 th thunder, the point where

[^16]we reach Davison's passage, $a b$, that is to say, a communication between Heaven (the 5 Chambers of construction, $S b b^{\prime}$ ) and Earth.
48. We have previously observed that on reaching $A$ upon the chronological scale OA, there are two ways of counting, either by following OABT, or by prolonging OA as far as W ; and it is this which brings out the remarkable date 1882 . But, in this first speculation, the scale was regarded as terminating at W ; we observe now that this scale OW ought to go on ; having arrived at the vertical line which passes through D , it naturally changes its direction in following this line. Now, it is in this way that the double nature of the two Books of the Apocalypse, the Sealed Book and the Little Book, is found symbolised. For the first, the continuation is made by a terrestrial horizontal chronological scale; for the second, there is a vertical celestial scale, and the bifurcation of the two is effected by the convolution of the great step in opposite directions; it is literally, that is geometrically (see Fig. III.), the node of the prophetic solution about to be unravelled.
49. The vertical chronological scale presents one remarkable peculiarity; this is the existence at each block of a horizontal ${ }^{1}$ ledge, which obliges the person who is
${ }^{1}$ The ledges are not horizontal at the northern extremity of the gallery.
measuring the levels of the rises of the blocks, to displace parallelly to itself in a backward direction, that is to say towards the north, the vertical rod which he is using, and this clearly teaches him that the height of each rise should be measured above the oblique scale AW from which he started. Thus the number marked by $a$ on the ascending chronological scale will be obtained in following this scale by WD and its ledges as far up as $a$. W marks 188176, and the difference of its level with the oblique scale is $z \epsilon r o$; in $a$ we shall therefore be raised, relatively to the oblique scale $A W$, by a quantity equal to the distance between $a$ and this scale, taken on the vertical of $a$; and the chronological number of $a$ will be $188 \mathrm{I}^{\prime} 76$ augmented by this distance. If we were contented with ideally prolonging the line WD and with taking on this line the difference of level between $a$ and W, we should neglect a very characteristic feature, the retrocession of $a$, which causes this point to be projected backwards from D to about a third of the width DB of the great step.

The measurements of the upper part of the grand gallery, considering their difficulty, are still somewhat rough. ${ }^{1}$ They are, however, sufficient, as we shall see, not to leave us in any doubt whatever about their symbolical meaning.

The vertical height of the grand gallery is, according to Colonel Howard Vyse, 336 English inches, say 335.664
${ }^{1}$ M. Flinders Petrie, loc. cit., p. 25.
pyramid inches ; according to M. Piazzi Smyth, this height at the southern extremity is 336663 .

The difference of level between $a$ and $f$ (see Fig. III.) is 34.965 (P.S.) ; the breadth of the ledge at $a$ is 2.997 (P. S.); from which we conclude, allowing for the obliquity of AW, for the height of $a$ above AW:

$$
\begin{gathered}
335664-34 \cdot 965-\mathrm{r} \cdot 48 \mathrm{I}=299 \cdot 218 . \\
336 \cdot 663-34 \cdot 965-\mathrm{r} \cdot 48 \mathrm{r}=300 \cdot 217 .
\end{gathered}
$$

Other determinations are furnished by the consideration that the southern extremity of the ceiling of the gallery is projected over the face DB of the great step at a distance from $D$ equal to $\frac{1}{3}$ of $D B,{ }^{1}$ in such a way that $D B$ is divided by this projection, and by point $G$ (or $C$ ) into 3 equal parts.

Taking the direct measurements of M. Piazzi Smyth, which give the breadths of the three first ledges and the height of the first four above $\mathrm{DB},{ }^{2}$ we may calculate (by the method of the least squares) the positions of the two straight lines which would pass, ist through the apices of the salient angles of the ledges; 2nd, through the apices of their re entering angles.

We find that the first makes an angle of $5^{\circ} 4^{\prime}$ with the vertical, the second an angle of $5^{\circ} 3^{\prime}$. We may therefore

[^17]consider them as parallel, and may take as the breadth of a ledge the distance between their points of intersection with BD prolonged, a distance which is equal to 2.92 . A simple calculation then gives for each of the straight lines the ordinate which, according to the above mentioned geometrical propriety, corresponds to the abscissa computed to run from $D$ to $B$, and for the first line equal to $\frac{\mathrm{DB}}{3}$, and for the second to $\frac{\mathrm{DB}}{3}-2.92$. The ordinates thus obtained measure the height of $a$ above DB , and are respectively $28 \mathrm{I} \cdot 8$ and 282.3 .
$a$ being projected at a distance from D equal to 20.33 $2.92=17.41$, we can therefore find out its distance from AW. We obtain for this distance the two values 296.25 and 296.75 .

The mean of the four computations

$$
299^{\prime} 22 \quad 300^{\prime} 22 \quad 296^{\prime} \cdot 25 \text { and } 296^{\circ} 75
$$

is equal to 298.1 . It is this mean number which is inscribed on Fig. III. as measuring the vertical distance from $a$ to AW.

We shall then have for the chronological number of $a$ (inscribed in Fig. III.)

$$
188 r^{\prime} \cdot 7^{6}+298 \cdot 11=2179^{\circ} 87
$$

(The four individual computations are $2180^{\circ} 98,218 r^{\circ} 98$, 2178.51 and 2178.01 . The height of $a$ above DB is 283.54 according to the four computations $284^{\circ} 53,285^{\prime} 53,28 I^{\prime} 8$, 282.3 ; this mean 283.54 is inscribed on Fig. III. Combined
with the distance 17.41 from D to the projection of $a$, it gives, for the chronological number of $a, 2179.75$. The distance WD is equal to 5.84 ; thus on the vertical scale we have $\mathrm{D}=18876$. On the horizontal scale we have $\mathrm{D}=1910 \%$, and the point-limit of the second third of the Great Step starting from B, that is to say, the projection of $f$, is exactly the present epoch, for this second third of the Step marks 18go 37, say during the course of the year 1891.)

Now, the 1335 years of Daniel, which, in his prophecy, indicate the supreme end of history, that end to which " Blessed is he that waiteth, and cometh," have previously made known the date 2178 .

On the other hand, on the horizontal scale, that of historical events, point P marks 217966; therefore, according to $a=2179.87$ (2178 to 2182), the entrance into the King's chamber, an entrance which is the evident symbol of the end of the history and expectation of humanity, is the epoch at which communication will be established between Heaven and Earth. The passage (Rev. XI., I 5, 18), compared with (X., 7), indicates, moreover, the nature of this event: " The kingdoms of this world are become the kingdoms of Our Lord and of His Christ, and He shall reign for ever and ever. . . . the nations were angry, and Thy wrath is come, and the time of the dead, that they should be judged, and that Thou shouldest give reward unto Thy servants the prophets, and
to the saints, and them that fear Thy name, small and great, and shouldest destroy them which destroy the earth." The entrance to the King's Chamber can, therefore, only signify the second coming of Our Lord.
50. Brück's law here furnishes a remarkable verification. The King's Chamber has precisely for its centre the fundamental epoch of decadence, corruption and idolatry of the quincentennial period, that which corresponds to the confusion of Babel, the most fatal crisis which crosses the life of nations. It is then that evil, in the last historic period, will reach a height, and that is precisely the reason why the reign then begins of Him who comes to bind Satan and to annihilate iniquity by Righteousness.

This also explains these words which accompany the announcement of the reign; (Rev. X., 6) "that there should be time no longer" ; (XI., I5, when "the Kingdoms of this World are become the Kingdoms of Our Lord").

The word time must not here be taken in its ordinary sense, as if it were a question of the passage from time to eternity, since it is said that the reign shall last for a thousand years (Rev. XX., 4), that it will be followed by a last revolt (Rev. XX., 7), and finally by new heavens and a new earth (Rev. XXI., I). It is taken in the sense in which it had already been used by Daniel, or rather in that sense which, by extension, is equivalent to the meaning in Daniel, as expressing the phases of the historic period.

There will be time no longer, not because the laws ordained by God to regulate the organism of humanity will be abolished, but because they will then be fulfilled (Matt. V., 17 ) ; the normal play of the different functions will have replaced their perversion: phases or time will have disappeared, so far as the fatal and critical character, by which they have previously been manifested, will itself have disappeared. The Spirit ( $\pi \nu \varepsilon \nu \mu a)$ will dominate entirely the animal soul ( $\psi v \chi \eta)$ and body $(\sigma \omega \mu a)$ (I. Thess. V., 23).
51. The Pyramid, by closely uniting the historic period, or the times of Daniel, with the revelation of the Kingdom to come, itself justifies this interpretation of the passage Rev. X., 6.

The chambers of construction, to which Davison's Passage leads (not destined to be measured), the passage which establishes communication between Heaven and Earth, rise above the King's Chamber exactly in its axis; this feature indicates the double nature, celestial and terrestrial of the reign of Christ. Their floors, formed of uncut stones, of unequal height, opposed to their cut ceilings, indicate that they themselves symbolise a habitation not terrestrial. Now, these chambers are five in number, and the distance between the summit $S$ of the arch of the highest (Campbell's Chamber) and the base $b b^{\prime}$ of the course of the lowest (Davison's Chamber) is precisely
equal to a period of 520 years. (This is measured on the plan prepared by M. Piazzi Smyth, according to Colonel Howard Vyse, Life and Work, Vol. II., Plate XIV.).

There remains, then, according to Colonel Howard Vyse, a height of 310 between the base $b b^{\prime}$ of Davison's Chamber and the floor of the King's Chamber. But the horizontal chronological scale, which extends to the further end of the King's Chamber, measures 206 from its entrance into this chamber to its extremity. If we continue the horizontal scale by the vertical scale, the 206 added to the 310 which remained, make 516 .
[Similarly, for the Queen's Chamber (Fig. IV.), we have :

> AN (distance from the foot of the Great Step to the floor of the chamber) $=824$,
and

$$
\text { PM (the breadth of the chamber) }=206 .
$$

Whence

$$
\mathrm{AN}+\mathrm{PM}=1030=2 \times 515]
$$

Thus the two periods 515.165 , relative to the same meridian, that is to a single nation, and 520.165 , relative to different meridians or to different nations, are characteristic of the Kingdom to come; and this accords with the universality of this kingdom, whose king is, nevertheless, consecrated on Sion. We may further remark that the 5 breadths of the 5 chambers of construction make a sum of $5 \times 206=1030=2 \times 515$, precisely equal to the life of a nation.
52. All that precedes has only brought out the node of the prophecy recapitulated by itself in Chapter X. of the Apocalypse, and symbolised by the convolution of the two chronological scales around the Great Step of the Pyramid. Another knot to untie is the signification of an image which plays a determining part in the course of the Little Book, and of which Brück's law will give us the solution. Chapter XIII. concerns a power, issuing from the sea of nations (XIII., I), and designated in the text by name of the beast of the sea. This beast described in Chapters XIII., 1, and XVII., 3, 7, 8, has seven heads and ten horns ; and the explanation of this symbol is to be found in the end of Chapter XVII., beginning at verse 9. The 7 heads are 7 powers (kings) of whom 5 have fallen; the sixth was existing in the time of Saint John; the seventh is not yet come, but it will make but a short appearance ; lastly, the beast is an eighth power, of the same order as the seven preceding, and following these seven in natural succession, and the ten horns form a group of ten other powers, which will be constituted at the same time as the Beast, and which will begin by abandoning their power and their strength to him, but later on will form a coalition against him. ${ }^{1}$

[^18]53. From the fact that the Beast has the power to make war during 1260 years (§57) (a length of time which is of the order of the life of a nation), we must conclude that the heads, or kings, who are of the same kind as the Beast, are not individuals, but rather political powers or nations.

Now, we have seen, guided by Bruick's law and by the Pyramid, that all history, beginning with the entrance of the descending passage, at the Deluge ( -2528 ), is summed up in the succession of 10 powers, of which the last is Great Britain.

The powers are:

```
rst. Noachians;
2nd. Assyrians (rst Egyptian Empire);
3rd. Egyptians (New Empire);
4th. Jews-Israelites, Phœnicians;
5th. Greeks;
6th. Romans;
7th. Franks;
8th. Papacy;
9th. France;
roth. Great Britain.
```

In the time of St. John, 5 of these powers had fallen (the fall of the first having taken place at the confusion of Babel, which serves as the basis and type for all prophecy) ; the sixth was still existing ; the seventh was to come, but was only to appear for a short time on the scene. Now, this is a veritable criterion; for, among all the nations of the series, the Franks are clearly distinguished by the fact
that the phases of their life as a nation remain, during the greater part of that life, veiled from the eyes of history. They emerge from this mist only during a period of four centuries, from Clovis to Charlemagne, and appear like links in a chain binding the south with the north.

Lastly, by the treaty of Verdun (843), Charlemagne's empire is broken up, and its partition marks out the present Europe (which virtually dates from the invasion of the Barbarians), and if ten kings then receive power, they are forced to resign it into the hands of the 8th King of the preceding series. The latter, by the extension of his power, is like a resurrection of the Roman Empire, whose centre of action he has preserved, a resurrection of that colossus which they believed wounded to death (XIII., 3), and which, rising from its ashes under a different form, and as though galvanised by its union with a foreign principle, ${ }^{1}$ excites the wonder of all the world [which, "wondered after the beast (XIII., 3)]. Thus is explained that empire which had been, which in reality was not, and which, under a different and unexpected form yet was (XVII., 8).
54. This interpretation becomes more and more evident by a closer analysis of the symbols. In what precedes,

[^19]we are specially concerned with the temporal power of the eighth king; here is the spiritual power which is united to him, designated as the Beast of the Earth (XIII., II) or the false prophet (XIX., 20); this last power confounds the Kingdom of Christ with the world, which belongs, in the present century (Gal. I., 4, 5), to the prince of this world (XIII., 4), and consequently it justifies the name of Babylon (Babel, confusion), which characterises its work (XIII., 17, 18 and XVII., 5).

Let us examine thoroughly the meaning of this new figure (the Beast of the Earth). The blind and restless waves of the sea of nations (XVII.; I5) are restrained, directed, varied in level and in form by the superior element of human intelligence; like the Earth, sure of its power, this superior element offers an impassable resistance to a brutal and unconscious force, which finds in it a master. But, on the other hand, this intelligence, however industrious and able it may be, is itself animal in the eye of the spiritual man, when it does not recognise the spirit of God. This is why the beast of the Earth designates a false prophet. It is, undoubtedly, a nation of men humanly both intelligent and educated. That he should take the appearance of the lamb, but speak like a dragon (XIII., II; XX., 2), means that he is possessed of the divine truths, that he presents himself as the depositary and interpreter of these, but alters the nature of them and turns them from their true meaning (Gen. III., I, 5) ; and this
is why also he has no greater enemy than the Word of God (XIX., I3, 20 ; XIII., II).
55. This false prophet is the minister of the new empire resuscitated; in it he exercises all terrestrial functions and persuades the world that this empire exists by Divine right and is the work of God (XIII., 12); further he wills that this empire should be centralised and personified like all the others; he will have even to his apogee, like the other beasts, wars of conquest (crusades) ; but the chief he sets up is, even more than all the rest, characteristic of his spirit of confusion. This chief is the image (XIII., 14) of an emperor, that is to say, the exact reproduction of an emperor, but such a one that we may at the same time maintain that he is not one; this image which has a soul (XIII., I5), which persecutes all those who do not adore him (XIII., I5), exercises or demands, under colour of a spiritual power, a very real terrestrial power, whilst the false prophet, who forces the earth to worship him, also enslaves by persecution all the forces of human activity, whether of action or thought (XIII., I6).
56. Without doubt, all these features which describe the natural tendencies of the human heart, may be recognised in several places and at different times; fur example, the great Babyion of the last days is not necessarily the Rome of the Popes, although it may be
possessed by the same spirit; but the numbers of the text do not permit us to suppose that here allusion is made to that Rome only as a spiritual type, and not as an actual reality. We can surely recognise the Roman Catholic Empire in this No. 8 of the succession of powers (XVII., II), whose quincentennial period of domination as chief nation commenced at the significant date of 843 . How, in short, can we avoid observing that this date is none other than the era of Daniel's numbers 1290 and 1335, reckoned from the establishment of idolatry which he designates under the name of abomination (Dan. XII., II, I2).
57. The 42 months which are especially accorded to him (Rev. XIII., 5) are solar months, for it is a question of the Christian Church (XII., I) ; they represent, therefore, 1260 years. Now, $843+1260=2103$, which brings us to point L, 2104.5 I , the first quarter of the phase of apogee KP (Fig. III.).

Thus the numbers 2300, 1290, 1335, $3 \frac{1}{2}$ times, 1260 , of Daniel or of the Apocalypse, all lead to the remarkable points $L, a, P$, of that phase of apogee of the last days. They make known the system of dates,

$$
2103 \quad 2133 \quad 2178 \text {, }
$$

and the points L, $a$, P mark, on the chronological scale,

$$
2104 \times 51 \quad 2134 \times 56 \quad 2179 \cdot 66
$$

The error of one of the series as compared with the other is systematic. With regard to this, it is interesting to observe, in passing, that the middle of the last quincentennial historic period, or

$$
2385^{\prime} 726-\frac{515 \cdot 105}{2}=2128 \cdot 1435
$$

enables us to find the middle point $M=2129.56$ of the phase of apogee KP, always with this constant positive displacement of about a unit, which the system of the points L, $a$, P had already. Further on we shall find ( $\S 86$, in the note) a conjecture concerning the reason for this systematic difference, which perhaps is in no way the effect of an error either in construction or in measurement, but which, on the contrary, appears to be intentional.
58. But here is what verifies still better, perhaps, that this dispensation indeed concerns the temporal and spiritual power, whose authority was politically constituted in +330 ; the spiritual foundation of this power has for its epoch 325 (Council of Nicæa) ; now, there are exactly four periods from that epoch up to the extremity of the chronological scale (at the further end of the King's Chamber).

$$
325+4 \times 515^{\prime} \cdot 165=325+2060 \cdot 660=2385^{\circ} 66,
$$

and the further end of the King's Chamber marks 2385726 .

That is to say that just as Pagan "Rome" existed for two periods as "The Empire" from -753 to +330 , for two periods as "The Lower Empire," from +330 to +1360 (taking of Adrianople), so Catholic "Rome," a spiritual power, lives as "The Empire" for two periods, as "The Lower Empire" for two periods, and ends its death struggle just at the close of the period of corruption which the reign of Christ comes to war against.

If we consider the stages as marked, starting from 325 , by one, two, three and four periods of 515.165 , they will become significant enough ; we obtain

$$
840 \cdot 165 \quad 1355^{\prime} 330 \quad 1870 \cdot 495 \quad 2385^{\circ} 660
$$

Now, 1st, the Treaty of Verdun; 2nd, the middle of Wiclif's Life (Reformation) ; 3rd, the present constitution of Great Britain and the fall of the temporal power of the Popes; 4th, the end of the chronological scale, give respectively

$$
843 \quad 1354 \quad 1870-7 \mathrm{I} \quad 2386 .
$$

59. The preceding fundamental points being obtained, let us now consider the whole plan of the Apocalypse for the explanation of the other numbers which the Sealed Book and the Little Book yet contain.

## The Staled Book.

60. The 7 seals, the 7 trumpets and the 7 vials refer to the three divisions into which the whole history of humanity divides itself, reckoning from the Deluge, the event with which the Pyramid also commences; namely:
ist, From the Deluge to the First Coming of Christ ;
2nd, From the First Coming of Christ to the Second ;
3rd, The Kingdom to Come.
This determination of historical limits will be completely justified by what follows.
61. Let us note first of all that the book is explicitly dated from the Deluge (IV., 3 ; V., I).

No valid objection can be advanced against this from the declaration of Chap. I., 19; "Write the things which are, and the things which shall be hereafter," a declaration which has hitherto led interpreters to place the commencement of the Apocalypse at the Christian era or in the time of Saint John; in a work like the Apocalypse which is: 1st, metaphorical ; 2nd, in expression not only accurate but profound, we must rely upon the transcendent idea that " things which have been, are."
62. As we have already said, the 7 th seal contains the 7 trumpets, and the 7 th trumpet contains the 7 vials.

Each of these dispensations is virtually contained in the preceding one, which it continues.

The 6 seals successively opened, refer to the powers (or, more exactly, to the great phases of social development characterised by the powers) which, up to the epoch of Christ, figure in the succession of nations in Brück's law. The last is, therefore, the Roman Empire. These powers are the Kings of Chapter XVII., IO, II; but this last text made allusion to the fall of Empires, for it drew attention to the fact that the eighth was to fall like those which had preceded it ; here it is a question of the elevation of Empires, and this is why, since history begins with the Deluge, at the apogee of the Noachians, enumeration begins with the Assyrians. We have, therefore, from the ist to the 6th seal as follows (Chapters VI. and VII.), each one with characteristics which the reader will easily verify for himself :
I. Assyrians. . (Nimrod, the mighty hunter before the Lord (Gen. X., 8), using his strength to destroy the malevolent powers of fallen nature).
2. Egyptians. . Appearance of organised military power (Ex. XIV., 7, 9 , Rameses II.).
3. Jews-Israelites, Phœnicians (Pre-eminently a commercial people).
4. Greeks. . . The conquering power, followed by impiety and 5. by persecution (Alexander and Antiochus Epiphanes); persecution of the synagogue, which is only the prelude to persecution of the Christian Church; the two persecutions will appear parallel in the time to come (VI., iI).
6. Romans. . . (VI., 12-17, and VII.). The power which virtually comprehends all subsequent history down to the latter days; succession of social troubles of all kinds, of darkness and of persecution against the Christian and Jewish Churches (VI. 12; comp. XII., r), but during which the Church of Christ will be gathered from all nations, and kindreds, and people, and tongues (VII., 9).
63. The very simple signification of the seals is of the utmost importance with respect to the plan of the whole book; for this reason it is also given in a second manner which completely verifies all that precedes.

Each of the 4 first seals, which correspond to the 4 first nations (the 5th seal is only the development of a characteristic phase of the $4^{\text {th, }}$, peculiar to the history of the Church, and which plays a leading part in the plan of prophecy, as we have seen from the Book of Daniel ; as to the 6th, which again corresponds to a nation, we shall see ( $\$ 65$ ) why it is here made an exception), is announced by an animal or living creature, the description of which is given in Chapter IV. Now, not only do these living creatures represent nations, but each one respectively symbolises the nation which it announces.
64. How could the nations be represented in a more ingenious and more accurate manner than by living organisms, possessing both the animal nature and the angelic nature (by their wings) (IV., $6,7,8$ ); and full of
eyes without and within ( 6,8 ), like those crowds whose thousand eyes contemplate the world without, and who yet have a thousand eyes within, since they are composed of thinking and reflecting beings.

This comparison of the nations to living organisms does not appear here for the first time in the Scriptures; it is only the reproduction and extension of an image already employed by Daniel (VII., 4). The first animal is the Lion, Babylonian (Dan. VII., 4), or the Assyrian (Gen. X., $8,9,10$, II) ; the second, resembling a Calf, is the type of the foolish moral abasement of the Egyptians, characterised by the worship which they rendered to that animal (as also to the $\mathrm{Ox}, \mathrm{He}$-Goat and Ram), a worship which caused Israel to fall into idolatry (Ex. XXXII., 4; I Kings, XII., 28-32); in the third living creature we find, in Judah-Israel, a nation having the appearance of a man, which may be understood in the spiritual sense; and if it were necessary to seek in animal nature (the Greeks did not possess, like Israel and Judah, that knowledge of the Divine Law which alone engenders the man) for an image of the Greek nation with its philosophers, and that Plato, who seems with an intense desire, to have invoked the coming of the unknown God, what could have portrayed it better than the Eagle, who, cleaving the heavens and fixing the sun, personifies an effort towards the ideal almost superhuman.

Therefore, it is the Eagle which announces the Greeks.
65. But why does the animal imagery not continue in the 6th seal, for the period which commences the power of the Romans, a period which the rapid survey forming the end of Chapter VI., and Chapter VII. extends to the latter days, seeing that it virtually includes all subsequent history? It is because a new element has intervened, which no longer permits the representation of the life of nations by simple animal life. The 6th seal leads to the coming of the Saviour; but then also begins that peculiar work of the Prince of Darkness, to which allusion is made several times in Scripture (Luke, X., 18; Apoc. XII., 7-17), and which effects a monstrous union of heterogeneous elements, a confusion (Babel), which no longer has a name; from its Satanic character, it is really neither animal nor human, and no longer responds to any combination of normal elements.

It is in a way analogous, that in Daniel, Chapter VII., in the prophecy relative to the empires of Babylon, Medes and Persians, Greece and Rome, this last empire, regarded as embracing in its consequences all succeeding history, is not designated, like the others, by a real animal, but by a beast who has no longer any name, "dreadful and terrible, which was diverse from all the others " (VII., 4-7, 19).
66. The four nations of the historic law, whose periods are comprised between the Deluge and the first coming of Christ, and which are designated in the Apocalypse by the
four symbolical living creatures (IV., 7 ; lion, calf, man and eagle) ; or by the four leaders mounted on horses of different colours (VI., I-8; white, red, black, pale), are already mentioned in Ezekiel and in Zechariah.
In Zechariah, they are enumerated as red, black, white and grisled-bay horses (Zech. VI., 2, 3). Further, one remarkable feature must be pointed out, in confirmation of the providential mission of the Israelites, who are found again in the Anglo-Saxons of the Reformation. In the Apocalypse (VI., 5), the black horse represents Judah-Israel ; now, in Zechariah, the mission of the nation with the black horses is thus defined, that they go forth into the north country (Zech. VI., 6) ; then, further on, when the enumeration of the different missions of these nations is finished, a new and special revelation, relative to the only nation represented by black horses, is addressed to the prophet : "Behold those that go towards the north country have quieted my spirit in the north country" (Zech. VI., 8).

In Ezekiel, the symbolism is especially remarkable, because the nations are represented both as distinct and as forming part of a single physical organism. As in the Apocalypse, these are winged animals (which indicate, here as there, the union of the animal with the spiritual nature) ; they form a system comprising the man, the lion, the ox and the eagle (Ezek. I., 5-10). But what is singularly worthy of attention, is the description which the prophet gives of the agent who produces, or who, at least, subjects
to a law, the life of these animated organisms. We find here, in the compared study of the Bible and the Pyramid, a new feature of resemblance. The Pyramid made known the fundamental constants of the physics of the Earth; the Bible reveals, in this First Chapter of Ezekiel, the nature of its peculiar dynamic organisation, an organisation of which Brück's historic period, measured by the diagonal of the King's chamber, is a consequence.

A short digression is here necessary. Brück was led to his historic law by theoretical considerations on terrestrial magnetism. His fundamental id a is, that there exists in the globe a circulation of fluid material (a subtle ether, which he wrongly identifies with electricity, but that is of no consequence here), provoked by the action of the sun and which is a direct function of the astronomical movements of the earth (rotation and revolution). This circulation is meridional, of unequal intensity in different meridians, and the whole system of currents which represent it, turns, in the earth, round the axis of the poles. From this it results, that in one fixed meridian on the earth there are periodic variations of the circulation, the phases of which depend upon the relative positions of this fixed meridian and of the movable meridians (these in which the intensity of the circulation is maximum or minimum), which make their revolution round the axis. An integral of organised beings, such as a nation, therefore finds itself subjected to periodic influences of the
medium ; these influences constitute predispositions which, on the animal nature of such a systematic aggroupment or nation, may have, as we observe, the force of law.

If several of Bruick's fundamental principles of physics are not exact, if, notably, the fluid material in question cannot by any possibility be identified with electricity, if even he is mistaken as to the direction in which the circulation is effected, a still closer analysis demonstrates, however, that the original idea, taken as a whole, stands good, and that a circulation analogous to that of which he has caught a glimpse, is in reality a mathematical consequence of the laws of electro-dynamics and astronomy. ${ }^{1}$

Well, let us suppose that we have rendered visible the subtle fluid of this dynamic system, of which the motive force is electro-dynamic and from whose system of currents the animated organisms of the nations derive their activity. We shall see, precisely as Ezekiel did, a fire and

[^20]the fire was bright, and out of the fire went forth lightning, it went up and down among the living creatures (Ezek. I., I3). The movable meridians of different periods, passing one within the other, and turning, not in their planes, but round the axis of the poles, in such a way as to face successively the four quadrants of the equator, are those immense wheels (Ezek. I., 18), made as it were a wheel in the middle of a wheel ( $\mathrm{I} ., 16$ ) and when they went they went upon their four sides (I., 17); they are so closely bound to the animal organisms that their movements and those of these organisms are regulated by each other (I., 19-21), the wheels being lifted up each time that the animals are lifted up from the earth (I., 19), that is to say, the apogee of a nation coincides with the upper passage of a movable meridian to the fixed meridian of this nation. Lastly, the movements of the movable physical meridians, by causing the conditions of the medium to vary, and by determining phases in the life of nations, will create predispositions to intellectual activity and to moral tendency, and it will be rigorously exact to observe with Ezekiel that the spirit of the living creatures was in the wheels ( I ., 20).

We must not leave this subject without drawing attention to a last feature of agreement between the system of the four nations of Ezekiel and that of the Apocalypse. Ezekiel concludes his description of the terrestrial organism by calling it a representation of the glory of the Eternal, manifested by a condition of things which dates
from the Deluge (I., 28). The Deluge is, therefore, in Ezekiel as it was in the Apocalypse, and as it is in the Pyramid-the prophetic era. Now, according to the physical theory, the complete organisation of the globe, with its present relief and decisive establishment of meridional circulation from pole to pole (the wheels of Ezekiel), really dates only from the Deluge, an event of which this theory defines the nature and demonstrates the reality. ${ }^{1}$ A universal crisis was then reached, which, as much physically as spiritually, constituted the era of a new humanity.
67. There remains one interesting feature to compare with all this interpretation of the seals, as far as they represent the history of the nations according to the quincentennial historic law, since the Deluge [the, epoch to which the Apostle is transported in spirit, in order that he may read the book (IV., 1, 2)]; this is the mention of the Elders in passage IV., 4. This expression, of itself alone, indicates that the era adopted is that of a characteristic event, which creates, not a conventional, but a real division in the history of humanity. These Elders belong to humanity before the Deluge; they are men, since they are redeemed by the Blood of

[^21]Christ and are to reign with $\operatorname{Him}$ (V., 8, 9, 10). With the four living creatures after the Deluge and before the coming of the Saviour, they sing in Heaven the "new song" of the "redeemed;" and thus they witness that the work of redemption applies to all humanity, those who preceded as well as those who follow the coming of Christ, a truth which was already revealed by other passages of Scripture (i Peter, IV., 6 ; I Peter, III., 19, 20).
68. The seventh seal commences the second division of history ; the latter is marked out by successive signals of trumpets, which announce to the end of time the coming of the true King. This division begins with a period ${ }^{1}$ of transition and of expectation when the spiritual eye is absorbed by contemplation of the mystery of iniquity ( 2 Th. II., 7) which is preparing, and which may be conjectured from the course of external events; on the other

[^22]hand, it is also a period of spiritual glory, the purity of the primitive Church; but even this purity will condemn the world (VIII., I; 5).

The seven trumpets, next, form two groups; the three last, 5, 6 and 7, are distinguished by the name of woes (VIII., I3); 5 and 6 designate by numerous and evident characteristics (as is already well known to interpreters of the Sacred Book) the Arabic and Ottoman movements; 7 designates the seven vials. They belong to three quincentennial periods, characterised by the epochs 800 , 1300 and 1800.

The four first trumpets, $1,2,3,4$, describe by their characteristic features, in rapid revision, the space of about four centuries which are occupied down to the time of the Arabs, by the decadence of the Roman Empire, by the movements of the nations of the North and by heresy. ${ }^{1}$
69. The seventh trumpet has not yet sounded; it commences the third division of history to which the seven vials belong. The latter will accomplish the last judgments of God (Comp. XI., 15, 19; XV., 5, 6, and XVI., 18, 21).

[^23]
## Tye

70. Just as the Sealed Book contains the history of the nations since the Deluge, ${ }^{1}$ so the Little Book, brought by an angel clothed with a cloud and having on his head the sign of the Covenant and of the Deluge, contains the history of the Church, at least virtually, since this same epoch of the Deluge.

But, on the other hand, this history is already explicitly recounted by the Old Testament up to the furthest point to which this Old Testament carries us in the special nature of the subject, namely, the restoration of the Temple; it is there, that reading into the depths of the future, the Holy Book has placed the last of the great prophets. It is, therefore, at this point also that the Apocalypse should take up and carry on the explicit recital.
71. The history of the Church is divided into two parts; that of the Chosen People and that of the Church of Christ.

The first, which commences, according to what precedes, at the restoration of the Temple, is contained in Chapter

[^24]XI., and continues up to the period of the seven vials, which it includes (Comp. XI., XV. and XVI) ; the second, of which the beginning is known from the accounts of the Apostles, is resumed at the epoch which ends the Apostolate of Paul, and is developed in Chaps. XII.-XIX; it extends, like the first, as far as the commencement of the reign of a thousand years.

## Che Story of the Chosen zaengle.

72. The first verse of Chapter XI., where the narrative of the Little Book begins, completely verifies the determination of the epoch at which we have just concluded that we ought to place this commencement ; that of the rebuilding of the Temple; for John is first told to measure the Temple of God geometrically, leaving out the Court, which was without the Temple and was given to the Gentiles (XI., 2.).
73. The edict of Cyrus is dated -536 . The 42 months of verse 2, lunar months (XII., 1), make 1239 years; they bring us to the beginning of the 8th century, as 1239-536 = 703. But after this epoch, Israel as well as Judah, the two Witnesses (XI., 3), whom the Lord does not forget, who will be restored and blessed once more in the latter days, (Isaiah, XIX., 17, 18, 25), will begin to manifest themselves and to bear witness to the world which is
treading under foot the Holy City (XI., 2). The 1260 years of their prophecy (XI., 3) bring us to $703+1260$ $=1963$, or to the remarkable point $\mathrm{F}=1963.2$ (Fig. III.); this is exactly the entrance into the Antechamber, that is, in the phase of organisation and of religious inspiration of the last period ( $\S 10$ and 21 ).
74. When they shall have finished their testimony, a political power, arising from the sea of nations (XI., 7), which is not necessarily the 8th King (XVII., II), for it is not represented with all the characteristics of this King (XIII., I), will persecute them to annihilation, leaving them for dead and taking pleasure in the contemplation of their ruin.

But what is this testimony which they must finish and which will be the signal for the outburst of a violent political reaction ? A remarkable feature in the Pyramid indicates it; this is the rectangular granite-stone ( X . Fig. III.), which lies immediately under the feet of those who enter the Antechamber.

This stone, of which the centre marks 1999.825 , say the year 2000, has its centre distant by 8 historic periods of 520 years, (which correspond to the different meridians), from the central date of the construction of the Great Pyramid ; because

$$
\begin{gathered}
520 \cdot 165 \times 8=4161 \cdot 320 \\
1939 \cdot 325-4161 \cdot 320=216 \mathrm{r} \cdot 495 ;
\end{gathered}
$$

and the central date of the construction of the Pyramid, which, according to Herodotus, occupied 20 years, is -2160 or, according to the numbers of M. Fl. Petrie; -2163 (§ 15 , gth), say for the mean -216 I 5 .

This stone, which is evidently connected with the Great Pyramid, the Hebrew Monument, is a Temple raised to the Eternal ; ${ }^{1}$ it is a stone of testimony which in a manner seals the long time of the prophecy of Israel and Judah in a state of humiliation (XI., 63), and abasement. The epoch of organisation will be a period of respite, during which this Temple will be raised. Then, as says Isaiah (XIX., 19), the ancient Great Pyramid and this New Temple, on different meridians, will be two signs erected to the Eternal, the one within the country of Egypt, the other on its frontier.

Israel and Judah will have finished their testimony (XI., 7) at the epoch marked by the southern edge ( $\beta$, fig. III.) of the stone, say in $1999.825+23.601=$ $2023^{\circ} 426$.
75. Let us now observe that the New Temple and the second Temple of Ferusalem are also evidently connected with each other. For, between the edict of Cyrus, which preceded the second Temple, and point Y-midway between

[^25]X , the centre of the stone, and K , at the extremity of the Antechamber-there are 5 periods belonging to a single meridian. In fact this middle point marks 2039.6425 ;

$$
5 \times 515 \cdot 165=2575 \cdot 825,
$$

and

$$
2039^{\circ} 6425-2575^{\circ} 825=-536 \cdot 1825
$$

which is the date of the edict of Cyrus.
Thus, the Pyramid, which proved the new or third Temple to be directly connected with the Pyramid itself, situated on a different meridian from that of Jerusalem, also connects this third Temple by a simple measurement with the second, situated on the same meridian. Everything therefore indicates that the granite stone X is symbolically the third Temple of Ferusalem, and that the construction of this temple will be immediately connected with the data of the Great Pyramid.
76. But this raising of the testimony of Israel and Judah (which, according to Isaiah XIX., also points to an increase of material power, provoking or accentuating the reaction of the Apoc. XI., 7), should it be interpreted as concerning the new temple alone? This testimony, so intimately bound up with the Pyramid, does it not in reality begin to be raised from the time that Israel reclaims in the eyes of the world its position as the chosen people, in the name of its faith in the Word and of the light which has just flashed forth upon it from the
measurement (Apoc. XI., I) of this temple or altar of stone (Isaiah XIX.) ? If the period of the "testimony" ends with the last stone of the Temple, it certainly began with the first measurement of the Temple, consciously undertaken in the spirit of the chosen people. Now, this measurement was effected in 1865 , and given to the world in 1866 and 1867 (see §§ 2,46). It is therefore in 1865-1867 that the period of testimony commences, at the dawn of Israel's Constitution, 1870, as chief nation (see § 21).
77. Let us now note that the end of the testimony, $\beta$, is half way between its commencement, thus determined, and the entrance into the King's Chamber, since

$$
2179^{\circ} 66-2023^{\circ} 426=156.234
$$

and

$$
2023 \cdot 426-156 \cdot 234=1867 \cdot 192
$$

(beginning of the year 1868).
But from the commencement of the testimony to the entrance P, there are 7 of Daniel's lapses of time, equal to $1335-1290=45$, intervals of which the last is already marked in $\boldsymbol{a} P$; for

$$
7 \times 45=315 \text { and } 2179 \cdot 66-315=1864 \cdot 66
$$

(in the course of the year 1865).
We therefore discover the explanation of the passage (XI., 9) in the simplest manner ; the days spoken of in this passage are evidently none other than Daniel's intervals
of 45 years. There are, indeed, $3 \frac{1}{2}$ of these characteristic lapses of time, which make 157.5 , from the end $\beta$ of the testimony to the entrance $P$ (the distance measured between these two points is 156.234 ); and these are the $3 \frac{1}{2}$ days (the half of a period of 7 days, which is bound up with the testimony, and which we have just found), during which Israel and Judah will be annihilated in the eyes of the world, and which begin at the end of the testimony (XI., 9). The text gives a decisive verification to this induction; it is said, in fact, that " after three and a half days, the spirit of life from God entered into them, and they stood upon their feet-a great voice from heaven saying unto them, "Come up hither; and they ascended up to heaven in a cloud, and their enemies beheld them;" that is to say that the Apoc. XI. is verified both by Apoc. X. (by the entrance of Davison's passage) and by Dan. XII., I2, which already agreed to make the entrance $P$ of the King's Chamber the moment of an extraordinary communication between heaven and earth, or the second coming of the Lord. These three texts thus verify each other by the intermedium of the Pyramid.
78. All this interpretation is again confirmed by what immediately follows in Chapter XI. For returning to the point where the Sealed Book leaves off, and briefly recalling (XI., I4) that the 6th trumpet had already sounded, the prophet says (XI., I5) that the 7 th angel "sounded"
the trumpet, and that great voices are heard saying, "The kingdoms of this world are become the kingdoms of our Lord and of his Christ ; and he shall reign for ever and ever." Lastly, as though to leave absolutely no doubt that all this concerns Israel and Judah, now united as formerly, the Ark of the Covenant appears in the heaven (XI., 19).
79. The chapter enumerates at the end the seven last vials, which belong to the third division of history, or to the King's Chamber.

## 間istory of the Ceyurch of Christ.

80. It begins (Chap. XII.) immediately after the close of the Acts, and it carries them on during the first imperial persecution; this first persecution preceded the epoch at which John writes; after having been punished himself in the second persecution, ${ }^{1}$ in 95 , he was then exiled to Patmos.

Through the persecution, the Church in its sorrow (XII., 2) bears children for Christ, that is those faithful ones who will reign with Him (XII., 5 ; XIX., I4, I5).

The persecution of which we have just been speaking passed through two phases. ${ }^{2}$

1 "Chronologie de Dreiss," p. 14r, 5th ed. Hachette, 1883. ${ }^{2}$ Ibid., pp. 139 and I40.
81. The first phase, in 64 , is connected with the burning of Rome (XII., 3), and with those political accusations in which are manifested already (2 Th. II., 7, and Apoc. XVII., 5) that spirit (XII., 3) which later shall provoke confusion in the world and in the Church (XIII.).

The martyrs are the seed of the Church; persecution creates apostles, and we shall meet with its fruits amongst nations, who at the present time are virtually lost in the desert of history. In this desert the Church will be nourished by the Word in secret during 1,260 years (XII., 6) ; this space of time brings us to the dawn of the Reformation, which has already been indicated by the change of level K L, figure IV., the birth of Wiclif, 1324 (§29). For $64+1260=1324$.
82. The second phase, in 67 , is that of persecution directly exerted against the preaching of the Gospel (XII., 9, II ; Luke X., I-18), in which persecution (according to tradition) St. Paul perished. But the seed will yet bear fruit; it will be met with again in a great empire of the North, after $3 \frac{1}{2}$ times (XII., 14) or

$$
3 \frac{1}{2} \times 515 \cdot 165=1803 \cdot 0775 ;
$$

that is to say in

$$
67+1803 \cdot 0775=1870 \cdot 08:
$$

this is the constitution of the Israel of latter days, of whom St. Paul is, as it were, the apostle.
83. It will be in vain that the waves of the Northern nations, in the social disorder which they provoke, will strive to drown the seed of the hidden Church ; the earth will swallow the flood and will thereby become more fruitful (XII., I5, 16).
84. After the period of persecutions (XII.), comes that of the adulterous union of the Church and the world (XIII.) ; and, for the spiritual man who contemplates this phase of history, the honey is changed into bitterness (X., 10).

This subject has already been discussed ( $\S 552$ to 58 ). The date given by Daniel and the Apocalypse, 843, and that given by Daniel, 330, distant from each other by a quincentennial period, are characteristic, and signalise the two critical epochs which are the pivots of our interpretation.
85. There remains now one word to say concerning the number of the Beast (XIII., 16-18). We are charged to count this number (which is given, 666) with understanding, that is, we must attach to it a spiritual meaning ; it is a human number (as opposed to the divine number, which will be 777) ; moreover the mark of the beast appears to be nothing else than the $\chi \boldsymbol{\xi} \sigma \boldsymbol{\sigma}$ (see the following paragraph) which expresses its number. ${ }^{1}$

$$
{ }^{1} \chi=600, \xi=60 \text { and } s(=\sigma \tau)=6 .
$$

One has found a large number of names of men agreeing with the nature of the subject and having 666 for their number; ${ }^{1}$ but the necessity of recurring to the spiritual meaning in order to make a choice, a choice which, in fact, has hitherto always remained uncertain, proves that, following the express charge of the sacred text, we must allow ourselves to be guided, in the first place, by the purport of a purely spiritual conception. It is surprising, moreover, that so little attention should have been paid to the fact that the book itself explains the matter, that it even gives the spiritual name in Chapter XVII., 3, 5. This name is Babel, or confusion, as the mark $\chi \xi_{\sigma \tau}$ also expresses, or Christ thwarted by the serpent; the number of this name will assuredly be 666 ; it symbolises the powerless and sacrilegious attempt of perverted humanity, which strives to realise the divine, 777, by means of the human, but which can no more attain to it in reality than, at the time of the first great confusion of the human and divine, the Tower of Confusion (Babel) could attain to the heavens.

This spiritual number 666, of a spiritual name, is undoubtedly reproduced in the Pyramid and in the most ingenious manner.

The history of the true Church has for its direction, as

[^26]we have seen, the horizontal passage which leads to the Queen's Chamber. Now, on the stone which sealed the entrance of this passage, is written by a number the name of the true Church.

This stone marks out the ascending scale which serves it as frontal, a space equal to $7.7 .7-10.10$, equal also to 3.3•3.3.3 (see § 27).

5 and io are the numbers of normal human intelligence and activity; 7 and 3 are divine numbers.

This means, that on the one hand, the true Church will include the divine united to the normal human, but without profaning them by confusion, and by constantly recognising its unworthiness in the sight of God (7.7.7-100) ; but at the same time, consisting of the children of God, it will realise a close and perfect union with the divine ; the human, 5, although absorbed and hidden within the divine, 3 , will not in any way alter its nature (3.3.3.3.3).

The false Church, on the contrary, will confound its kingdom with that of God, will ascribe to itself the divine nature and will assume the Divine not only with the human, but with the powerless and corrupted human nature aspiring to 7 and not being able to attain to it. To it will belong, until the dawn of the Reformation, 6 of the 7 periods intentionally indicated (see $\S 33$ ), which extend from O to $\mathrm{M}^{\prime}$ (Fig. IV.). ${ }^{1}$ Each period is equal to

[^27]$216=6.6 .6$. ; it repeats itself in vain 6 times and exhausts itself; it never succeeds in establishing the change of spiritual level (Fig. IV., point K), that new birth in which the divine alone must work without intermingling, and thus it moves forward always in the confusion which its number expresses. Taking $\mathrm{K}=1303$ (M. Piazzi Smyth, 1303.03), we have $1303=6 \times 6.6 .6 .+7$.

Passage XIII., 18, therefore, contains a very profound and instructive spiritual meaning, worthy of the character of the rest of the Book; but we see that the Pyramid alone was permitted to count the number in all its profundity. ${ }^{1}$
${ }^{1}$ We must again repeat that, according to the text, it is in no way a question of finding a name of which the numerical value, obtained as we were reminded in a preceding note, is 666 , but rather to count with understanding the number given $\chi \xi \sigma \tau$, that is to combine its digits, guided by the spiritual meaning of the name, also given, which is Babel, or confusion. It is evident that one of the reasons for this arithmetical representation, in itself very expressive, is to furnish a very delicate and very precise proof of the harmony between the Bible and the Pyramic. The condition of multiplying the three figures 6 of 666 in order to produce 216 , by making an appeal to an algebraic notation entirely modern, suffices to indicate that the discovery could only correspond with the present epoch; and what removes every possible doubt, is that the same process of multiplication is applied to the divine number 777, which the Pyramid reproduces in this manner on the frontal of the horizontal passage, after having divided the floor of this passage into 7 parts, in order to bring out, always by means of this same notation, the number 666 or $6.6 .6=216$.
86. The vision continues, always in perfect chronological order, in Chapter XIV.; the false Church is succeeded by a Church which, founded upon the old covenant, sings, however, a new song ( $\mathrm{r}, 3$ ), earnestly seeks the truth, and carries the eternal Gospel to every nation and kindred, and tongue and people (6). Lastly, after this history of the Reformation and its consequences, and a remarkable passage (XIV., 12, 13, 14), with which compare (III., 10) and which seems to allude to the translation of the Church, ${ }^{1}$ the final period of the 7 vials is mentioned. ${ }^{2}$

[^28]After the 7 vials, which carry to a height the impiety of men (XVI., 2I), and the announcement of the condemnation and ruin of Great Babylon (XVII., XVIII.), or the work of the spirit of confusion, wherever and in whatever direction it may have been accomplished (work of which the power in Chapter XIII. is the type and origin)-after these seven vials, there comes, with His redeemed, the King of Kings and Lord of Lords, the Word of God (XIX., $11-16$ ) ; this is the decisive confirmation of the Kingdom (XIX., 6), and is immediately followed by the
the corresponding phase in Daniel, phases which precede the second Advent, are exceptions: the first is later than the second by about a unit and a half. Everything, therefore, tends to the belief that this systematic delay is intentional, and the impossibility of bringing into rigorous coincidence the literal indications of prophecy and of the Pyramid, is indicated by the formal declarations of the New Testament relative to the veil in which the exact epoch of several of the events of the latter days will remain enveloped. The small extent of the uncertain region which measures the indecision, places the teaching of the Pyramid in harmony with that of Scripture; we are advised to observe the precursory signs of the Advent of the Lord, and by them we may be assured that it is nigh; but as to the day and the hour, that is to say, as to the exact date, no one will know them. It is also useful to recall, as regards the interpretation of the latter days, that Scripture never authorises the chronological identification of the translation of the Church and the second Advent; these two events differ essentially in so far as the time of the first is not even approximately indicated, as is that of the second. The beginning of the kingdom will be a universal mani-
destruction of all the malignant terrestrial powers (XIX., 19-2I) and by the victory over the Spirit of Evil himself, who is placed beyond the possibility of doing further mischief (XX., I-3).

The Reign will last for a "thousand years" (XX., 4), then comes the last revolt ( $7-10$ ) and the Judgment; finally, the new Heavens and the new Earth, where Righteousness dwells, where there shall be no more sorrow, nor crying, nor toil, for the former things are passed away, neither shall there be any more death (XX., I-4).
festation, but the first return will be invisible to the world, and its continued expectation should be to-day, as it was in the early times of the Church, the habitual attitude of the Christian's soul; each day brings him nearer to it, and each day he may expect to see its realisation. The symbolism of the Pyramid, doubtless, appears to assign to the date of this mysterious event a lower limit, which is that of the Great Step; but this lower limit is precisely the present epoch, that is to say the epoch at which, for the first time, the knowledge of this limit itself is given. Thus everything combines to prevent that at any moment in the history of the Church its attitude of incessant expectation may be interrupted.

[^29]87. By an æsthetic opposition easily appreciated, just as it was necessary, in the course of the prophetic Book, to take the description of the interval of time figuratively, whilst we took the number literally (as in 1260 days which equal 1260 years), so now, when we give the description of time literally, we must take the number figuratively. This is why it seems that here the number one thousand, joined to the word years, which appears for the first time, metaphorically expresses a great length of time. There is another æsthetic and literary reason for this, which arises from the very nature of the subject; at the point which the reader has reached, although understanding that the Kingdom will not last for ever, he is thankful that its duration is not indicated in a concrete manner. It is, in a manner, a step towards the new Earth and the new Heavens themselves, to which no duration is assigned.

This is confirmed by the Pyramid; everything there indicates that the duration of the Kingdom will be much greater than " 1000 years."

We have already seen how the quincentennial period is symbolised in the King's Chamber, and in the Chambers of Construction which are above it, and how all this represents the nature, both celestial and terrestrial, of the Kingdom. Now, in the King's Chamber, the 5 courses of the sides trace round the chamber 5 millenary cycles, and they appear, by forming ideally a spiral rising towards Heaven (the Chambers of Construction), to continue the
horizontal chronological scale; this ideal continuation of the chronological scale is the symbol of a great length of time, for us undetermined; now, it is, in a manner, the environment of the Kingdom; it defines the Reign anew as both Divine and human : the highest of the five courses, or the last of the five cycles, contains 7 facing stones (the divine number); and, at the same time, these five courses or cycles, constitute a whole, a systematic human ensemble, for they contain altogether exactly 100 stones.

## 

88. As regards the King's Chamber, there remains one important point to elucidate. The 7 th trumpet opens the King's Chamber, and the 7 vials belong to this chamber. This is at once verified in a remarkable manner by the division of the horizontal roof of this chamber into 7 parallel panels. ${ }^{1}$ The roof of this same chamber separates from the earth the celestial temple, out of which come the 7 angels who pour out their vials upon the earth (XV., 5-7). But these panels, having their lengths parallel to the chronological scale, which stretches to the further end of the chamber, do not divide that scale, that is to say, do not explain the chronology of the vials.
[^30]They only establish the existence of a relation between the King's Chamber and the period of the vials, in a manner analogous to that in which the 7 overlappings of the Grand Gallery established a relation between this gallery and the period of the 7 trumpets. Here there is a most remarkable feature of resemblance. We are now concerned to know how far into the chamber this period of the vials extends, which is the last of the judgments provoked by the impiety of men, and what characteristic sign will enlighten us?
89. Let us enter the chamber. We perceive the 5 superposed horizontal courses, having each one its vertical joints. The chronological scale goes straight to the southern extremity of the chamber; exactly at that point, according to the historic law, ends the complete life of the power which the advent of the Kingdom will do away with. Now, ist there is no trace of division by 7 on the floor of the chamber; 2nd, to the right and left, the explorer indeed sees the vertical joints of the sides east and west marking out stages for him ; but as, even by counting the end joints (the intersections of these sies with the sides north and south), each course, east or west, only presents as a maximum 6 joints and 5 stones, he does not perceive there either any trace of division by 7. Lastly, by taking the sum either of the joints or of the stones, of the courses
east and west on the same level, the number 7 can only be obtained for the fourth course above the floor; and even then 7 will be found to equal the sum of the joints only by subtracting the end joints north and south. All this signifies that we do not discover any characteristic sign of the vials in immediate relation with the chronological scale, if we move onwards in time to the end of the normal life of the Beast.
90. This reminds us that the time of the great Tribulation of the last days has been shortened (Matt. XXIV., 22 ; Mark XIII., 20) ; which means that the power to conquer will be withdrawn during part of the time which natural law would have accorded for the development of all its forces. Let us, therefore, suppose that the decisive victory which confirms the Kingdom takes place in the central axis of the King's Chamber, a symbol which would be remarkably expressive. Look at the median east and west plane $M$, passing through the axis; the parallel sides north and south, N and S ; and the six horizontal planes $\mathrm{P}_{1}, \mathrm{P}_{2}, \mathrm{P}_{3}, \mathrm{P}_{4}, \mathrm{P}_{5}, \mathrm{P}_{6}$, counted from the floor $P_{1}$, which limit the five horizontal courses I., II., III., IV., V., (whether east or west), of the sides E, east, or W, west.

The planes P and the planes $\mathrm{M}, \mathrm{N}, \mathrm{S}, \mathrm{E}, \mathrm{W}$ divide the chamber into 10 compartments; 5 between $M$ and $N$, and

5 between M and S. Each of them is faced, east and west, by two half courses on the same level. Count, from north to south, the joints in each of these facings, including their end-joints, that is to say, their intersections with plane $M$, and with $N$ or $S$. We shall obtain the following table :

From N to M.
From M to S.
I. II. III. IV. V. I. II. III. IV. V.

East. Number of joints
West. Number of joints
$\begin{array}{llllllllll}5 & 3 & 4 & 4 & 2 & 3 & 3 & 3 & 4 & 2 \\ 4 & 3 & 4 & 4 & 2 & 4 & 5 & 3 & 3 & 2\end{array}$
By adding the numbers of each vertical column and subtracting 2 from each sum, we shall have the numbers of different marks traced on the chronological scale for the observer who moves through the different compartments from north to south. (We subtract 2, because the two intersections of E and W with M are reduced to one, and the same thing happens with the two intersections of E and W with N or S .) The numbers of different marks are therefore:

|  | I. | II. | III. | IV. | V. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| From N to M | 7 | 4 | 6 | 6 | 2 |
| From M to S | 5 | 6 | 4 | 5 | 2 |

Now, all these numbers, except the first, are lower than 7. Thus, of the 10 compartments, the first, that into which we penetrate immediately on entering the chamber, and in following the chronological scale as far as the median plane M , alone presents the number 7. This
propriety, peculiar to the lowest course, which rests upon the chronological scale, was a fit symbolical sign to indicate the place which the period under consideration should occupy on that scale. This sign should appear all the more remarkable here as our knowledge of it results from the interpretation of a passage of Scripture (see the beginning of this paragraph) which, from its very nature (that is from its chronological nature) must find an explanation in the present theory.

Moreover it does not suffice that the stages marked by the vertical signals to the right and left, should be 7 in number, they should still be different. Now not only are they undoubtedly different, but they alternate in such a manner as to form a system. They mark, in fact, starting from the entrance N , which is the first, as far as the median plane M , which is the last, the distances :

| I | 2 | 3 | 4 | 5 | 6 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | Left | Right | Left | Right | Left | M |
| 0 | 16.8 | $34 \cdot 4$ | 47.3 | 66.6 | 91.2 | $103^{\circ} 03$ |

From this we conclude that the period of the 7 vials extends into the chamber from the entrance as far as the axis, and that the latter, in conformity with our hypothesis, therefore symbolises the final victory over the powers of evil.

We shall find later a remarkable verification of this deduction in the study of the lower system of the Pyramid.

## $\gamma$ Digression.-A Retrospective Survey of Daniel, Chapters IX. to XII.

91. The ideas which we have just acquired enable us to interpret several passages in Daniel, especially interesting, not only because they verify our previous deductions,' but because they may also be used as a key to the rest of our subject. They serve the latter purpose in the analysis which we have yet to make of the Letters to the Seven Churches (the spiritual history of the Church; chapters I. to III. of the Apocalypse); for this reason this analysis is placed after the present digression.

Ist. The Historic Table of Chapters X. to XII.
92. Chapters X., XI. and XII., which terminate the Book of Daniel, are a continuation of one another, and in reality form but a single account ; they trace an historic table of the march of humanity, from the time of Daniel down to the latter days, taking for argument, in each epoch, the political opposition between the North and the South.

The limits of the account are clear. The last part, XI., 45, and XII., I (already indicated, X., 14), brings us to the beginning of the kingdom to come, that is to the entrance of the King's Chamber, 2180. The beginning, X., I3, and XI., I, carries us back to the times of Danie】
himself (Cyrus, Darius the Mede, and Cambyses) and is therefore limited by the date -536 .

We see succeeding each other:
The end of the kingdom of the Persians, as is explicitly stated (XI., 2) ;

The empire of Alexander - 330, and its partition among his generals (XI., 3, 4) ; then (5-13) the struggle of about three centuries between the two characteristic agents in the reactions of the North and the South, Syria and Egypt. (There are special features easily recognisable, as, for instance, XI., 6, 7 [Berenice]).

The centre of interest is then displaced towards the West ; it is the North, it is the Romans, who rise irresistibly to supreme power, extending their domination towards the South into Judea and Egypt (14, 18) (XI., I4, Cleopatra) ; then follow, ist, their extension towards the North, and an ephemeral effort to establish their power in Great Britain (18), which will be the designated adversary of the Roman world when, later on, it is itself King of the North ; 2nd, the progressive enfeeblement of their radius of action, and that unexpected decision of Constantine (329), by which Rome falls and is to be found no more, seeing that another city carries off its power and its rights, and that for Rome to have no longer any being except as a subordinate of the Imperial power, is to be no more (19-2I).

Later, for this subordinate power is substituted that of the Bishop of Rome; a very humble power in the be-
ginning, which is not overthrown by the flood of barbarians, and which, from its moral ascendancy, is truly, at a given time, the Prince of $a$ Covenant (21,22). But this power, by its skill and deceit, after having made itself acceptable everywhere, will throw off the mask and will become the strongest temporal power in Europe (23). In the meantime it will have had as lieutenant of its work the Franks; the history of the latter is summed up in their establishment in Gaul, their struggle against the Arabs (the King of the South, 25), which is followed by a species of equivocal transaction with the power of the Caliphs; lastly, by the seal that their power puts to its understanding with the Papacy by bequeathing to the latter the empire of the world in 843 . (Verses $24,25,26,27,31$ ).
93. But this great fact is preceded by two others, the mention of which is characteristic, and of fundamental interest from the point of view of our study. The first is the war against the Saxons (verse 28); the second, that against the Lombards, during that close of the reign which was troubled by the incursions of the Normans (29, 30). Now, these Saxons and Normans, the one persecuted, the other threatening, are both designated as the nations of the "Holy Covenant." This remarkable passage, inexplicable without our theory of the identity of Israel and of the Anglo-Saxons, becomes with it, a ray of light truly decisive.
94. After the struggle against the "Holy Covenant," the Franks will make terms with the "Apostates from the Holy Covenant," and "the abomination" will be placed in the sanctuary (31). This is the epoch 843, already established in various ways by prophecy.

Accordingly we see clearly depicted the "eighth king," whose reign henceforth fills history. Speaking implicitly against the God of Gods (36), even while instituting a sumptuous form of worship (38), he will persecute those who faithfully keep the covenant, and will cause others to betray their trust (32, 35). He who distinguishes himself among all nations by the institution of celibacy as a system (37), will yet have, like all the other nations, wars of conquest or of national interest, and in these wars (the crusades) he will take the side of a God whom he acknowledges and yet does not know (39).

This reign of the "eighth king" is the raison d'être of all our modern history. It brings us down to the present times, when the king of the North country, passing through Europe, will re-enter the ancient territories of history, Egypt and the land of Israel (40-43), and will therein extend his rule until he himself, like every terrestrial power, falls in his turn (XI., 45), and the Reign begins of Him who alone is King of Kings and Lord of Lords (XII., I).
95. It is interesting to observe the manner in which this great prophecy respects the historic perspective. Counting by verses, we have first-from XI. 3 to XI. 17, 18-16 verses from the epoch of Alexander to the Christian Era; then-from 18 to $3 \mathrm{I}-\mathrm{I} 3$ verses down to the end of the Frank Empire and the beginning of the empire of the Popes (843) ; lastly-XI. 3I to XII. I15 verses, which carry us to the beginning of the Kingdom in 2180 . Now, these three equal extents of the narrative correspond to the respective intervals of time, 400, 800 and I 300 years-say $400,2 \times 400$ and $3 \times 400$ years:

## 2nd. The 70th week of Chapter IX.

96. The times of Daniel, which are none other than the historic periods of the nations given by Brück's law, and by the Pyramid, throw light upon a celebrated passage of Scripture, which has hitherto remained entirely unexplained. It concerns the meaning of the 7oth week of the prophecy in Chapter IX., a chapter which we have previously intentionally omitted in reviewing the Book of Daniel.
97. Daniel having known, from the prophecy of Jeremiah, that the captivity would last for 70 years, implores the Lord not to delay the execution of His promise, and to restore Jerusalem and the Temple. He goes back to the time when God carried the children of

Israel out of Egypt and brought Himself great renown (IX., 15); Daniel recalls the infidelity of this people, manifested by their whole history; but at the same time he humiliates himself, and prays God to put an end to the shame of the captivity. It is then that the Word which the Angel heard from the mouth of God at the "beginning" (IX., 23) of Daniel's supplication, is carried to him by that Angel. This is what that Word first declares, "Seventy weeks are determined upon thy people and upon thy holy city" (therefore, not only upon the city, but, even before that, upon the people), "to finish the transgression, and to make an end of sins, and to make reconciliation for iniquity, and to bring in everlasting righteousness, and to seal up the vision and prophecy, and to anoint the most Holy." The end of this declaration, taken in its natural sense, applies not to the time of the Saviour's death, but rather to the last days. Moreover, no era whatever is assigned to these 70 weeks, and nothing assigns a common era to all of them. The extreme point in the last times to which the 70 weeks bring us, turns our thoughts towards the beginning which Daniel recalls, to that epoch at which the Lord brought his people out of Egypt and "hast gotten thee renown, as at this day" (IX., I5) ; and if we notice that the Word replies to what has been said from the beginning of the supplications (IX., 23), we shall naturally see in this first declaration a general date embracing the whole life of the people, from
the time of Sinai and the taking possession of the Promised Land, down to the last days of the Restoration.
98. This general declaration is afterwards analysed and split up into two others :-

Ist. From the decree giving the order to rebuild Jerusalem, to a first leader "Christ," there are 69 weeks; these are weeks of years; the decree is that of Artaxerxes Longimanus, in $-453 ; 69 \times 7=483$, and in fact : $483-453=30$.

This result undoubtedly proves that the anointing of the most Holy (IX., 24), which can only take place after the 7oth week, can not be understood of the baptism of Jesus.

When the 483 years have passed, Christ, the first leader, will be cut off, the innocent suffering for the guilty (IX., 26) ; then a nation, who later, will have for their chief a second leader, different from the first one, will destroy the city and the sanctuary. This brings us to the destruction of the Temple, in 70, by the Roman people, that is to say, by the people whose empire was to fill the World, and from whom, in conformity with all prophecy, should virtually come forth Antichrist.

2nd. The two leaders being thus clearly opposed, then comes the second part of the prophecy (IX., 27): "For one week" He shall confirm the covenant with many; and "in the midst of the week" He shall cause the sacrifice and the oblation to cease; this abolition itself, by means of
the spirit of idolatry, "the overspreading of abominations" will become the cause of a desolation which, to an extent determined beforehand, will later fall upon him who has been the author of it.

It is clear, from the very nature of their different works [this difference of nature is moreover clearly emphasised by Daniel (IX., 26, 27)], that the two pronouns he do not refer to the same leader, but the first he to the first and the second to the second leader.
99. What, then, is this 70th week which gives no explanation of itself whatever if we consider it as seven years placed after the 69th week ?

The Book of Daniel itself takes care to indicate its meaning; for when, after all the revelations which he has received, Daniel asks : "How long shall it be to the end of these wonders (XII., 6) ?" the reply is, that it will be for $3 \frac{1}{2}$ times or the half of a week of 7 times. The 70th week, of which it is nowhere said that it follows the 69th, must therefore, according to all probability, be that week of 7 times of which the existence is certain from the preceding passage. ${ }^{1}$

[^31]100. We must now notice that the text calls attention first to the people, and then to their country (the holy city).
A. For the country (a fixed meridian), the week which has just been defined equals $7 \times 515 \cdot 165=3606 \cdot 155$ years; subtracted from the 2133 to which Daniel's other numbers on the same subject have led us, these $3606 \cdot 155$ years bring out the era -1473.155 , that is to say, the entrance into the Promised Land after the coming out of Egypt, which Daniel had at first recalled. The number given by the Pyramid for the coming out of Egypt is $-1512 ;$ to -1515.7 (§ 17), and the 41 years which elapse before the passage of the Jordan give, therefore, for the entrance into the Promised Land - $1471 \cdot 5$ to - 1474.7 , say for the mean -1473. The 1516 years of Biblical chronology point, on their side, to 1475 .
B. But there still remain certain features unexplained. First, this week relative to the country of a holy people does not terminate at the beginning of the Kingdom of Christ, when the seal is put to vision and to prophecy, for Scripture itself explains (Rev. X., 7 and XI., 15), that this utterance applies to the beginning of the 7 th trumpet. Further, this great interval of time which terminates at the Kingdom and begins to "finish the Transgression," ought to commence at " the establishment of the Law ;" this great week during which the King who is to come will confirm His Covenant, ought to begin at that Covenant, that is, at
the Law of Sinai, or at the coming out of Egypt which Daniel recalled in the beginning of his supplications.

This naturally leads us to regard now the great week as relative to the holy people, and no more to the holy city.

The chronological value of the times of this week should first be sought amongst those that the Book of Daniel, in accordance with the Pyramid and Brück's Law, has already attributed to the duration designated by this word time; these possible values (515.165 and 516; 520165 and 521) have been mentioned in §§ 19 and 20.

In the present question, two considerations may, a priori, determine the most probable of them.

Ist. If this week of Covenant begins at the coming out of Egypt, in accordance with what we have just said, the times are probably no longer relative to a single fixed meridian (as when they concerned the country of the chosen people), and they must designate the values $520 \cdot 165$ or 52 I.

2nd. On the other hand, the choice of the greater of these values, 521 , seems to be supported by the text, in this sense, that it presents this whole week, which extends from the Covenant to the Kingdom, comprehends both the Old and the New Testament, and realises the final expectation of humanity with the character of a maximum of extension.

But should we either allow ourselves to be guided by these reasons in choosing the value in question, or, not
reckoning these, should we admit one of the three first, which are less probable, that none of the weeks obtained in any of these possible methods of counting the times, would represent in an arithmetical manner, the duration of the Great Week of Covenant, of which the limits have been fixed. (See page 138 , ist paragraph of B).

Must we conclude from this, either that the harmony between the Bible and the Pyramid is here at fault, or that the solution is beyond our power? Yes, if we have sifted all the data at our disposal; no, if we have not come to an end of our resources. Now, this is actually what has taken place. The difficulty arises simply from the fact that in this problem, as in every other, the method consists in introducing successively all the data, and in this case one last feature of the prophecy remains, which hitherto has never been explained; this is the subdivision of the 69 weeks into 7 and 62 .

In saying that after 7 weeks and 62 weeks, that is, after 69 weeks, Christ will come, the prophecy indicates clearly that a group of 7 weeks of years, or 49 years must be set aside. It then takes up its general data concerning the 69 weeks, and, speaking of their fulfilment, it says that this fulfilment (Christ will be cut off, \&c.) will take place after the 62 weeks (those into which the 69 have just been subdivided, and which form the second part of the subdivision); that is to say that though considering here the whole group of 69 , which has just been formed by
adding the 62 to the 7 weeks, it hints that these 7 should again serve as the basis of another combination. As at the same time, by quoting only 69 of the 70 weeks, it attracts attention to the 7oth, everything teaches us to form a group with the 7 weeks of years, or the 49 years separated, and a 70 th week of which the unit of time will be different from that of the 69 other weeks.

If now, guided by the reasons previously indicated, we take the duration of the historic period, or the time, of $521=3 \times 7+5 \times$ 10 $\times$ 10 years, by adding 49 years, or the seven weeks intentionally set aside by Daniel, we obtain

$$
52 \mathrm{I} \times 7+49=3696 \text { years. }
$$

Now, this last number, itself forms a week of 7 times, equal to $521+7$ or $7 \times 528$, and this week is unquestionably the great week of Covenant, having the limits assigned by prophecy. For, by adding 3696 to the date of Sinai, we get $-1516+3696=2180$, which is the date that indicates the beginning of the Kingdom, or the entrance into the King's Chamber in the Pyramid, at the 7 th trumpet of the Apocalypse. We have in fact obtained for this entrance, in the Pyramid, 2179.66, that is to say, the year 2180 .

Remark. The existence of a great week of Covenant, which extends from the Law to the commencement of the Reign, leads us to consider generally, that is, in so far as it embraces the entire history of humanity, the very fact
of the Covenant between God and man, and to enquire if the period of this Covenant is not also determined by the period of 528 years, just deduced from Daniel's numbers, which would constitute a new and decisive verification of the exactitude of this deduction. Now, this Covenant, by the promise of the Deliverer (Gen. III., 15), begins immediately after the Fall, when the Prince of this world enters into his kingdom. Moreover, we obtain cur knowledge of the probable epoch of Adam's temptation, from the parallelism established by Scripture between the celestial Adam and the terrestrial Adam, between Adam and Christ (i Cor. XV., 21-23, 45-57). The temptation and fall of the terrestrial Adam correspond to the temptation and victory of the celestial Adam; hence we must conclude that Adam was 30 years old at the epoch of the fall; consequently, according to our chronology (sec. 12, table V.), the first promise of the Deliverer is dated -4154 . Now, from this epoch to the Mosaic Covenant at Sinai, there are 5 periods of 528 years, for

$$
1516+5 \times 528=4156 ;
$$

and, since from the Law to the Coming of the Lord into His Kingdom, there are 7 of these periods, there must therefore be 12 of them from the accession of the Prince of this world to his kingdom to the coming of the Lord into His. (5 is the human number characterising the length of
time prior to the promulgation of the Divine Law ; 7, the divine number which expresses the duration of the spiritual dispensation properly so called.)

These 12 periods are the 12 hours of the day of which the Lord speaks in his parable of the husbandmen and the vineyard (Matt. XX., I-16) ; and thus is explained, as we intimated in §68, the term "half-hour" of the Apocalypse (Rev. VIII., I). They also equal 6 of those days of which each is "as a thousand years" in the sight of the Eternal ( 2 Pet. III., 8 ; Ps. XC., 4), that is, equal $6 \times 1056$ years; and thus in accordance with an old Judaic tradition, it is verified that the Messiah will come at the beginning of the seventh thousand years, that is, will begin the seventh day, the day of rest of the Eternal (Gen. II., 2, 3). Lastly, the material creation is in a manner, the Scripture, the type of the spiritual dispensation; the celestial Adam enters into His Kingdom on the seventh day, just as the terrestrial Adam entered into his dominion on the seventh day, all the work of God being finished; and as on the fourth day the luminous fire appeared which gives light upon the earth (Gen. I .,14-19), so on the fourth day is revealed to the world the sun of righteousness with healing in His wings, for

$$
-4154+4 \times 1056=+70,
$$

i.e. the date which ends the old Judaic economy by the destruction of the Temple, the witness of the old
covenant, and by the decisive dispersion of that chosen people who did not know the Light when it visited them. We must notice that this date +70 is precisely the era of the "half-hour " of the Apocalypse (Rev. VIII., I) (§ 68), which constitutes a new verification.
101. From this we conclude that the 70th week of Daniel, is a week of times formed, according to the indications of Daniel himself, in accordance with Brück's historic periods and of the Pyramid. This week may, moreover, be understood as referring either to the chosen people, or to the country of the chosen people. That which relates to the chosen people extends from the Law of Sinai to the Reign of Christ. This is the great Week of the Covenant. That which relates to the country of the chosen people extends from the entrance into the Promised Land as far as that epoch of 2133 to which in several different ways, we have previously been guided. Just as the Testimony or Temple raised to the Eternal, in the epoch of organisation of the last quincentennial period, corresponds to the rebuilding of the Temple, contemporary with the epoch of organisation of Cyrus and Daniel, so the event signalised by this date 2133, at the epoch of apogee of the last period, corresponds to the rebuilding of the city of Jerusalem, contemporary with the epoch of apogee of Artaxerxes and Nehemiah. The parallelism is complete. The event
of 2133 appears, therefore, to concern rather the great city itself, the adulterous city, in the streets of which will be seen the dead bodies of the witnesses after their testimony is finished (Rev. XI., 8). It is very probable that the rebuilding of the streets " and the wall, even in troublous times," of which mention is made in Daniel, IX., 25, like a far-distant glance beyond the death of Christ, on the future of the city where he shall be crucified (Rev. XI., 8), is precisely that event relative to the "Holy City" of which the epoch is the number $2133 .{ }^{1}$
${ }^{1}$ The $3^{\frac{1}{2}}$ times of Dan. VII., 25, interpreted according to Dan. VII., 26, 27, as limited by the commencement of the Kingdom, find an immediate verification in the value of time, 528 years, which we have just established, by the parallelism between Dan. VII., 7, 8, 11, 12, 19-27, and Rev. XIII., I, XVII., 3, 7, 8 and the verses following. The four beasts of Daniel represent: 1 , The Babylonian-Assyrians; 2, The Medo-Persians; 3, The Greeks; 4, The Roman Empire, regarded as embracing in its consequences all the subsequent history of Europe; the powers which arise from it are those ten horns which belong to the fourth beast, and the little horn represents a seer and a prophet lowly to begin with (compare Dan. XI., 21, 23, 36), but finally monopolising a power almost universal, in which we can clearly recognise the Papacy. This little horn is none other than the beast, the eighth king, the false prophet of the Apocalypse, whose power is correlative with ten others, represented, as in Daniel by ten horns (Rev. XVII., 12). The era of the $3 \frac{1}{2}$ times or $3 \frac{1}{2} \times 528=1848$ must therefore be our characteristic date 330 , and thus they bring us actually to the beginning of the Kingdom (entrance of the King's Chamber), since $330+1848=2178$. This interpretation of the ten horns and or
102. There remains yet another verification of our determinations of the 70th week. It is said that in the midst of this week, the leader opposed to Christ will cause the spiritual "sacrifice and oblation" to cease; we
the little horn of Dan. VII., is confirmed in proportion as we search into the features of the prophecy. According to Dan. VII., 24, the ten horns are ten powers which will raise themselves on the ruins of the Roman empire, and the little horn is a power of which the development "will follow" that of these first horns: according to Rev. XVII., 12, the ten horns "will receive power as kings one hour ${ }^{1}$ with the beast," that is, with the little horn. Now Europe is already rudimentarily marked out by the invasion of the barbarians, whilst as yet the temporal power of the Papacy only virtually exists : and on the other hand, it is only at the partition of Charlemagne's empire that Europe is definitely formed, but this time, simultaneously with the material power of Rome. As for the number ten, which here characterises the group of these European powers, we may first observe, that in whatever manner we count them, we always reach a total of ten principal nations. Taking, for example, the present Europe, proceeding with regard to longitude and latitude, we count from $I$ to 10 , the following list of powers :

1. Spain. 2. France. 3. England.
2. Italy. 5. Germany. 6. Scandinavia.
3. Greece. 8. Turkey. 9. Austria.
4. Russia.

It may very justly be remarked that Turkey here constitutes an artificial sub-division; but Nos. 7 and 8 originally formed but a single country, which was the Greek empire; No. 9 was represented

[^32]have already deduced from Daniel XII. that the epoch corresponding to this indication is +330 ; and that this attempt on the spiritual "sacrifice and oblation" is precisely the cause which later, in 843 , will place the idol (the abomination) in the sanctuary. Therefore the centre
by the kingdom of Hungary; while, on the other hand, No. 5, Germany, then included two very distinct parts: the German empire in the centre of Europe, and the Pomeranians and Borussians, or Prussians, to the north-east, in the same longitude as the Greeks and Hungarians. 7 and 8 being united, and 5 being thus divided into two (this division into two corresponds to the distinction which still exists between Prussia and South Germany), the ten are met with again quite naturally.

We may perhaps define too generally, that is to say, in a manner scarcely clear enough for a demonstration, this same political structure, according to the number io, at the time of the invasion of the barbarians. It is therefore better to relinquish it. In any case, the purport of this number io cannot be of interest unless it is connected with the consideration of some fundamental datum imposed by the very nature of things; we must then search for this datum, and effectively it does exist.

The natural political distribution of nations is only an expression synonymous with the geographical distribution. If the latter presents a systematic boundary, it should be met with in the former ; but the one is subject to variations, the other is constant; it is therefore the second which should first be studied. Now, the fundamental feature of geographical distribution, a feature directly recognizable in the separation of the waters, and which also settles the boundaries of the natural habitation of nations, is the relief of the soil. In this respect Europe is subdivided in the following manner:-Bounded on the east by the Oural, it first includes the Asiatic-European valley, or Caspian depression, in which the fan
of our 70th week should enable us to discover this same epoch of +330 .

Now, the half of the great week relative to the city equals $\frac{\sec (155}{2}=1803.08$; the half of that relative to the nation and to the Covenant equals $\frac{3006}{2}=1848$.
of rivers, the Volga, Don, and Dnieper, constitutes Russia proper. The rest is characterised, ist, by the Italian-Germanic-Scandinavian meridional dorsal ridge; this ridge and its two watersheds west and east, form three meridional bands; 2nd, by two parallel ridges which, by cutting through the system of the three meridional bands, form with them nine compartments. These nine compartments joined to that of Russia which is defined by the Caspian depression, realise an actual subdivision of Europe into ten parts; they have imposed a law upon the distribution of nations and given a reason for the number ten which appears in the enumeration of the chief nations of Europe. The two parallel ridges are evident; the southern is the continuation of the Pyrenees, Alps, and Balkans, which isolate to the south, in the three meridional bands, Spain, Italy, and the Greek Empire; the northern ridge starts from Land's End, separates the Seine from the Scheldt and the Rhine, the Danube from the northern rivers, the Elbe, Oder, and Vistula, and continues its course towards the east, outlining the sources of the Russian fan of rivers; in the three meridional bands, the compartments which it marks out to the north are England, Lower Germany and Scandinavia, lastly Prussia (the Borussians). The parallel zone which is enclosed between the two ridges forms, with the three meridional bands, the three last compartments; France, to the west, with its rivers flowing to the west; the node of central Germany (Switzerland), which presents itself as a point of expansion from the waters in all azimuths; lastly to the east, the valley of the eastward flowing Danube, politically characterised as Austria.

And, in agreement with the prophecy, what do we obtain?

$$
-1516+1848=332
$$

and

$$
-1473+1803=330
$$

It is thus proved that the political subdivision of Europe into ten States, indicated by Daniel, is in no way arbitrary, but that it rests upon a very important datum in the physical geography of this continent.

We have still to discover the signification of one special feature of the prophecy; it is that the little horn which rises among the great ones succeeds in subduing three of them (Dan. VII., 24). Where in Europe must those diseased nations be sought whom the enervating influence of the Roman Church has weakened, and who, committing adultery with her, are about to die if they do not repent of their deeds (see Rev. II., 20-22; III., 2; and later, our analysis of Chapters II. and III. of the Apocalypse). It is easy to eliminate a certain number; out of the ten horns, it is evidently neither England, nor Scandinavia, nor Prussia, nor Russia, nor the Hellenes; but it is most certainly Spain; it is Italy which, after a secular servitude, begins to throw off the yoke of the false prophet. (See Rev. XVII., 16.) There, in no equivocal manner, are two of the three horns supplanted by the little horn. The last can only be found in one of the three compartments of the parallel central zone, and there undoubtedly, we are again enabled to point out the profound influence exercised by Catholic Rome. However, it is not France, which always repelled the Inquisition with indignation, struck the heaviest blows at the Jesuits, and defended the liberties of the Gallican Church against Rome, which can with justice be compared to a power clerically enthralled; neither is it the central compartment, the European node whose high peaks and valleys have been at once the asylum and the bulwark of the
103. In following the preceding solution step by step, we see that it is neither more nor less complicated than the elements of the problem itself; it is really the result of an application of the methodical rule which introduces successively in the deduction, all the data, and nothing but the data.

The text of Daniel has just furnished us with one verification (relative to the epoch 330); another, yet more remarkable, is about to be obtained from the Apocalypse ; its spiritual history of the Church, of which we have yet to make an analysis, is precisely that of Daniel's great week of Covenant.

Christian faith and of liberty; but very probably the eastern compartment might be the third horn, for to-day it is more bound by the spirit in question than any other part of Europe perhaps, and presents itself as the natural heir of that Holy Empire of which, in the course of a secular duration, the Pope has been a veritable prince.

To sum up, of the ten powers of Daniel, there are two, who in an evident manner, are subdued by the little horn; there is also a third which visibly presents this same character. Moreover, with the prophet, we can count no more than three. The distribution of these three is further remarkable, because it marks out the progress, decreasing with latitude, of the influence exercised by the false Church. This influence is measured by the supplantation of two powers in the southern parallel zone; by that of one in the central zone; by none in the northern zone, that is, in the desert where the Church is hidden to be nourished by the Word, and manifested in the latter days. (See Rev. XII., 6.)
(8) The Letters to the Seven Churches.
(Revelation, Chaps. I.-III.)
104. A general survey at once shows that these letters contain a spiritual history of the Church, and not a series of Addresses to contemporary Churches.

This is first indicated by the chronological order of the two historical allusions relative to Balaam and Jezebel (II., 12, 14, and 18, 20); it is also demonstrated by the manner in which the announcement of the second Coming, the fundamental subject of the whole book (I., $1,3,7$ ), in a manner crosses the plan of the Letters; as the reader advances, this event presents itself as nearer and nearer. In the ist and the 3rd Letters, the declarations, " Repent
. . . or else I will come unto thee quickly," "I will remove thy candlestick out of his place," "I will fight against them with the sword of my mouth," are warnings or menaces relative to special events concerning the ist and the 3rd Church ; but in Letters 4, 6 and 7, allusion is made to the Coming itself, in the following terms:

To the 4th Church is said, "That which ye have already hold fast till I come, for he . . . that keepeth my works unto the end, to him will I give power over the nations," etc. (II., 25, 26).

To the 6th Church, after having spoken of the last great Tribulation which is to overspread the world before
the advent of the Reign, it is said, "Behold I come quickly, hold that fast which thou hast," etc. (III., IO, II).

Lastly, to the 7th and last Church, whose spiritual state (III., 15-18) corresponds exactly to that which the Lord had already described when he said, "When the Son of Man cometh, shall he find faith on the earth?" (Luke, XVIII., 8), the Advent of the Reign is announced as imminent, "Behold, I stand at the door and knock" (Rev. III., 20).
105. From this we must conclude that the spiritual phases which are characterised by the different Churches, succeed each other and are not contemporary ; but we further observe that the chronological succession applies rather to the appearance of tendencies peculiar to these phases than to a succession of determined intervals of time, of which a single interval should be occupied by each phase. In fact several of the Churches, after having been introduced, are regarded as subsisting and preserving their own peculiar character until the end. It will be sufficient to quote that of Thyatira (the 4th) which is told to hold fast that which it has until the Coming of the Lord.

The Churches symbolised by the candlesticks (I., 20) or
light bearers, should, moreover, from the broadest point of view, be regarded as designating social organisms, depositaries of an idea; we see this from an example of the two witnesses (Israel and Judah) (XI., 4) (§ 73) ; they are especially called the two candlesticks, and are consequently the two Churches which do not cease to exist (throughout all history).
106. Not only do we know that there is here a succession of phases, but we also know the epoch which limits it, namely, the beginning of the Kingdom to come. We have only to determine the epoch at which it began.

Now it is clearly indicated by passages I., 12, 13, and 16 (we see, in the midst of the seven candlesticks, the Son of God, out of whose mouth issues the sharp two-edged sword of the Lave and of Grace), that the whole period, embraced by the symbolism, is that of the Covenant or of the Two Testaments; it is therefore, by a natural induction, the period which extends from Sinai to the beginning of the Kingdom, that is, the period which in the Pyramid, comprises the entire system of upper passages as far as the entrance into the King's Chamber; it is then the great week of Covenant (the 70th week) of Daniel, of which the limits, previously determined
are -1516 and +2180 , and of which the duration is equal to $7 \times 528$.
107. Let us first examine, apart from any special systematic plan of thought, the succession of the great phases of Church History.

Three are evident: ist, The history of Judah-Israel from Moses to Christ; 2nd, The subjection of the Christian Church to the temporal power of Roman Catholicism; 3rd, The liberation of the Christian Church by the Reformation, and the diffusion of the Gospel throughout the world.

Each of these three great phases naturally divides itself into several others.

In the Judah-Israel phase, it is evident that we must distinguish the times of the synagogue which follow the rebuilding of the Temple and which continue up to its destruction, from those severe times of the Laze which extend from Moses to David and Solomon; and that of these two extreme periods, neither resembles the troubled intermediate part, that of Dispersion, of Captivity and of Prophecy.

In the phase of subjection of the Christian Church [in the time of St. Paul the mystery of iniquity was already beginning (2 Thess. II., 7)], it is not less clear that it would be unjust not to make a distinction between the

Church of the Fathers (those learned doctors in whom the Reformation itself has always recognised some evangelical authority), and the kingdom of this world which succeeded it and whose argument of authority, which dispensed with all other, was a demonstration of terrestrial power.

Lastly, the Scripture reveals to us that, even in the phase of the Reformation, the end will be a period of universal falling away, of indifference, created by a situation in which, for the second time, terrestrial interest will cause spiritual interest to fade away. We cannot without injustice neglect to make a marked distinction between these lukewarm times and the heroic ardour of the first centuries of evangelical awakening.

A very general view of the subject therefore naturally divides the whole period which comprises it into seven partial periods; three for the Judah-Israel dispensation; two for the adulterous union of the Christian Church and the world; two for its attempt at freedom whilst awaiting the second coming of the Lord.
108. Here a very interesting datum comes in, which, I think, has never before attracted attention; it is that the symbolism is to be met with even in the names of cities, really existing, by which the different Churches are designated, even in this word " Asia," which indicates theis situation.

156 THE SYMBOLICAL NAMES OF THE TOWNS.

1, Ephesus. 2, Smyrna. 3, Pergamos. 4, Thyatira. 5, Sardis. 6, Philadelphia. 7, Laodicea, are equivalent respectively to :
r. Foundation, Course.
2. Myrrh, a precious substance, which is sheltered to preserve it, " odours which are the prayers of saints" (Rev. V., 8). ( $\Sigma \mu \nu \rho \nu a$, myrrh ; $\Sigma \mu \nu \rho \nu a$, Smyrna);
3. Completion of the marriage, the legitimate union of husband and wife.
( $\Gamma$ a $\mu \mathrm{s}$, marriage; $\Gamma a \mu \epsilon \iota$, to marry; see also Пєраs, issue, result of a thing; חєpaw, to bring to an end, to achieve, Пє $\rho \gamma{ }^{\prime} \mu$ оs, Pergamos) ;
4. Prostitution, adulterous union.
5. Derision.
6. Fraternal love.
7. The upright nation (false righteousness having for its foundation sight, substituted for faith, or the diffusion of the science of external facts; see further on, § I16). [Aaos, people, multitude; $\Delta x k \eta$, righteousness; naodıkos, judged by the people : naodıкєıa, Laodicea).

As for the name of Asia (A $\sigma$ a), in Greek it means the Daughter of the Ocean, or the world risen from the waters; therefore in placing the seven Churches in Asia, the spiritual history of the Church, under a veiled form, whose suitability to the subject is ratified by æsthetic sentiment, teaches that the period which it embraces is subsequent to the Deluge. It thus indicates what the Sealed Book and the Little Book (the history of the world and of the Church), the first chapter of Ezekiel, and the Pyramid have already taken as their special subjects; and it gives a new demonstration of the unity of plan in the systematic whole which we are studying. Further, this name of Asia is not only a word ingeniously chosen from a Greek legend; it expresses a truth (of which the legend itself serves as a verification) borrowed from the physics of the globe. That science teaches, that the universal telluric crisis of the Deluge consisted in the establishment of the great Asiatic-Columbian meridional upheaval (passing through the Straits of Sunda and the Isthmus of Panama, and curved in the form of an $S$, as much in Asia-Australia on the one side as in the two Americas, on the side diametrically opposite). ${ }^{1}$ Therefore, without its being necessary to recur to the meaning that a Greek tradition (itself the result of an exact recollection)

[^33]gives to the word Aria, the inspired Text, founded on the physics of the globe, dates its subject at an era posterior to the Deluge, from the scle fact that it transports it symbolically to the continent of Asia.
109. This subject, as we have established, simply from the historical point of view, divides itself into seven parts or phases (§ 107), and their total duration is already known in advance, as constituting a week of 7 equal times (§ 106) ; everything therefore leads us to think that these 7 times are precisely characterised by these 7 phases. We thus obtain the following table of correspondence :

| ChurchesPeriods <br> of 528 years. |  |  | Centres. |  |
| :---: | :---: | :---: | :---: | :---: |
| I. Ephesus | -1516 to |  | -1252 | The foundation of the spiritual edifice. |
| 2. Smyrna. | -988 to |  | -724 | The city which is the object of a precious and hidden preservation, whose prayers rise to heaven. |
| 3. Pergamos | -460 to | +68 | - 196 | The city of the legiti mate union. |
| 4. Thyatira | 68 to | 596 | +332 | The city of the adul terous union. |
| 5. Sardis | 596 to | 1124 | +860 | The city of derision. |
| 6. Philadelphia | 1124 to | 1652 | +1388 | The city of fraternal love. |
| 7. Laodicea | 1652 to | 2180 | +1916 | The city of false righteousness, and of external science the lot of humanity. |

The parallel between the seven chronological periods
and the seven historical periods is striking. It remains to be developed.
110. Ephesus. The first period extends from the Exodus to twelve years after the end of Solomon's reign. It is especially that of the Law, of that law which, during the whole of the great week of Covenant, will remain the foundation of the spiritual edifice, and which Christ Himself will come not to destroy, but to fulfil. For this reason, in the superscription of the letter, He who speaks, describes Himself as animating by His Spirit the seven Churches (Rev. II., I).

It is this which is confirmed by the promise (II., 7), " To him that overcometh will I give to eat of the tree of life, which is in the midst of the Paradise of God." In the symbol by which all the spiritual life of humanity was revealed to the first man, the Tree of the Knowledge of Good and Evil was the Law which gives death. In order to live, the sinner who is under the power of the Law must eat of the Tree of Life; this tree represents Grace; it is bestowed in Him, the seed of the woman, who comes, by wounding Himself, to bruise the head of the serpent (Gen. III., I 5).

There is an evident difference, from the point of view of spiritual zeal, between the beginning and the end of the period (between the times of Moses and those of the end
of the reign of Solomon and the schism of the Ten Tribes) (Rev. II., 4), and the diminution of charity, degenerating into infidelity, will later cause the trials of the Dispersion and Captivity (II., 5); nevertheless nothing impure is allied with the doctrine during this period (II., 2).

On this head, one particularly interesting feature is the mention of those Nicolaitanes who are a second time mentioned in the letter to the Church at Pergamos (the synagogue). One has in vain sought for the historical trace of these Nicolaitanes, from the point of view that they constitute a sect, and that the sacred writer was contemporary with the Churches whom he addresses. This name is, in fact, like all the others, a symbolical name; it is derived from Nıк\&vv, to conquer, to rule, and from Lairns, man of the people, the people. The spirit of the Nicolaitanes, is that of human domination over the souls, ostensibly in the name of spiritual truth; it is this which to-day is called the clerical spirit (ruler of the laity), that spirit which hides from the people the true authority, that of the Word, which engenders almost fatally the loss of sincerity and of goodness, and withdraws all confidence from those who, in the guise of religion, are infected by it. The Lord declares that He hates it (II., 6), and praises the Church of the Mosaic Law for hating it also; for the same reason, here, as elsewhere in the New Testament, he condemns this spirit (II., 14, 15) in the synagogue, where the
hypocritical Pharisees have introduced it. Lastly, in the same place, as though to prove that Pergamos (the synagogue) is a continuation of Ephesus, he says that the Nicolaitanes of Pergamos are those who have retained the doctrine of Balaam (which belongs to the commencement of the period of Ephesus), a doctrine which had the effect of drawing Israel into an adulterous union with the world (II., I4).
111. Smyrna. Its period extends from the separation of the ten tribes to the times of Ezra and Nehemiah (rebuilding of Jerusalem), that is, to the times of the Synagogue $[-988$ to -460 instead of -999 to -453 (edict of Artaxerxes)]. It is, therefore, conspicuously the Church of Prophecy, of the dispersion of Israel and of the captivity of Judah. The first meaning of its symbolical name (see the fourth column of the table in § 109 ) is explained in a remarkable manner, precisely by the fact of the disappearance of the ten tribes of Israel, whom the prophets declare, however, almost incessantly, to be the constant object of the solicitude of God, and destined to be found again in the end of time. The centre -724 of the period, so near to the very date of the dispersion -758 , again attracts attention in another way to this same fact; even the address of the letter makes allusion to it, for He who speaks, designates Himself as
" the first and the last, which was dead, and is alive" (II., 8) and, in verse 10 , this existence, concealed during a determined duration (of which the numerical measure will be explained further on in §117), is openly announced; "Fear none of those things which thou shalt suffer; behold, the devil shall cast some of you into prison, that ye may be tried; and ye shall have tribulation ten days; be thou faithful unto death, and I will give thee a crown of life" (II., 10).
112. Pergamos. Its period is that of the Synagogue [ -460 to +68 instead of -453 (edict of Artaxerxes) to +70 (destruction of the second Temple)]. It, therefore, comprises the time of persecution (by a movement of impiety) of the Judaic Church, a persecution which is the subject of the 5 th seal (VI., 9-1I); it also includes the coming of the Saviour and His death; and because it thus covers the line of separation between the times of the Law and the times of Grace, He who speaks, designates Himself, in the address of the Letter, as " He which hath the sharp sword with two edges" (II., I2) [see § 106 (I., I6)]. It is in the times of this Church, that of the legitimate union, that the Husband shed the blood which renders the Spouse or Church fruitful ; and what leaves no doubt on this head is that the Saviour himself is named as having been slain in the Church of Pergamos, whose faithful
disciples sinned on that occasion only through ignorance (II., I3, and Acts III., 17-19). It is He who is this faithful witness (II., 13 ; comp. I., 5), this Antipas (avtı, against ; $\pi a \sigma$, each one) (II., I3), this one opposed to every man, or (more grammatically) this man to whom everyone is opposed; it is He whom each one meets with at least once in his life, because He is the true Light which lighteth (John, I., 9), who then, by the Holy Spirit, convinces of $\sin$ (John, XVI., 8) every man coming into this world.

The passage (II., 14, I5) relative to the Nicolaitanes has already been explained in the paragraph on the Church of Ephesus (§ IIO) ; it sets the Synagogue in opposition to the old Church of the simple Mosaic Law.

Lastly, the promise which terminates the letter (II., 17) draws its significance from another promise, constantly repeated in Scripture, that of the reunion of Judah and Israel in the last days. Just as formerly, in the Desert, the manna descending from heaven fed the chosen people, so, later, Judah will receive the spiritual manna of that Word of which the hidden Israel of the Church of Smyrna will have become the mandatory. But, in the Pyramid, this hidden life of Israel is symbolised by the horizontal passage and the Queen's Chamber, to which it leads; and the stone which formerly sealed the entrance of it bears in numbers, on its frontal (§85), the name of the true Church of Christ, of which no one knows himself to be
a member except by the internal witness of the Spirit. Thus access to the hidden manna is to be opened to Judah by giving him a stone whereon a new name is written, which no one knows but he who receives it.
113. Thyatira. Its period, which extends from the Roman apogee to the Frank apogee [68 to 596, instead of 74 to 594], has for its centre 332, the first of Daniel's two fundamental epochs, 330 and 843 . It is, therefore, as its name indicates, the Church whose carnal union with the world "causes the spiritual sacrifice and oblation to cease" and which by that means afterwards leads to the spiritual depravation of Sardis ("the abomination shall be placed in the sanctuary "), the period of which has for its centre 860. But we cannot sufficiently meditate on the admirable equity with which the sacred Text, ist, separates Thyatira, or the Catholic Church, from the Roman Papal Church, properly so called, or Sardis (to whom it only accords in derision the name of Church); 2nd, distinguishes in Thyatira itself, the two elements irreconcilable in nature which compose its spirit, namely, the Christian element and the element of purely human doctrine, that which is not of the world, and that which emanates from the Prince of this World.

The letter, for this reason, begins with both praise and blame.

The praise (II., 19) relative to the works, of which the last surpass the first, is characteristic of the Church to which we suppose it to be addressed.

The reproach is not less so (II., 20) and it was already known to us from the analysis of other parts of the Apocalypse. This Jezebel, the false prophetess, is the false prophet or Beast of the Earth of Chaps. XIII., in, and XX., 10 ; it is the woman (the Quas, bacchante) who makes all nations drink of the wine of her unbridled fornication (XVIII., 3).

A long time has been given to this Thyatira to repent of her fornication (II., 2I), for her life, by virtue of Brück's Law, should last until the second coming of the Lord, as we have already seen with regard to the 8th King, and as is stated a little further on (II., 25). But Thyatira will not repent (II., 21 ); consequently the false prophet and the nations whom he seduces will fall into a state of abasement and of intellectual as well as spiritual inferiority, and the spiritual as well as the intellectual power (II., 22, 23) will pass from the one half of Europe into the other half. But in the midst of these diseased nations (II., 22), we must distinguish with care the simple souls who have never known or appreciated the crime of the false prophet and the Satanic depth of his doctrine (II., 24), from those who have known, tolerated or professed it. To the first, it is said that they are not to let go what they already possess of spiritual truth, that one thing needful, received
by them in hearts without guile and carried out with faith, and that they must hold it fast until the return of the Lord (II., 25, 26). In the Kingdom to come, the admirable spirit of organisation of the system of which they are the machinery (II., 24) will, animated by the Spirit of the Lord, become a useful instrument, and that which is evil will be changed into good (II., 26, 27). But this promise concerns only the "sancta simplicitas." Those who know the spirit of the false prophet, become accomplices if they are silent, culpable if they do not protest ; and the only thing which is said to them is "Come out of Babylon, my people."
114. Sardis. Its period extends from the Frank apogee to the apogee of the Papacy, which it includes [595 to 1124, instead of 595 to 1115 ]. Its central epoch, 860 , is the second fundamental epoch of Daniel, 843, that in which the abomination is placed in the Sanctuary. This Abomination, or "idolatry," is the Image of the Apocalypse (XIII., I5), prepared by the False prophet. He who speaks to the Church of Derision, which is the pretended ruler by divine right of all the Churches, reminds it in the address of the Letter, that He alone is the Sovereign Pastor and Prince of Bishops (comp. III., I ; I., 20 ; Heb. XIII., 20 ; 1 Peter, II., 25 and V., 4) ; to this Church of Derision, whose most important argument
has always been its own existence, the fact of its temporal greatness, allied to its spiritual authority, and who by means of the one has led simple-minded people to believe the other, the Lord speaks only in a sort of derision. "I know thy works, that thou hast a name that thou livest, and art dead " (III., I). [" He that sitteth in the heavens shall laugh; the Lord shall have them in derision (Ps. II., 4).]

Sardis is the continuation of Thyatira. The Jezebel of the latter had been cast into a bed and her children threatened with death (II., 22, 23) ; here, the Church is dead (III., I), and without other preamble, it is told to strengthen "the things which remain, that are ready to die" (III., 2). However, a few of the people of Sardis have not defiled their garments, and the Lord will not blot out their names out of the Book of Life (III., 4, 5). This declaration sufficiently proves (as conclusively to those who are not of Sardis as to Sardis itself) that only personal faith has any value, that no one has a right to identify the true Church of Christ with any external form whatever, and that this Church is a spiritual edifice of which the stones are the children of God, wheresoever their place in the world may be. ${ }^{1}$

[^34]115. Philadelphia. Its period extends from the Papal apogee to the French apogee (iI24 to 1652, instead of 1115 to 1635) ; it begins with the first awakening of the evangelical spirit among the Vaudois (an awakening condemned in II79 at the Lateran Council); it has for its centre 1388, the constitution of the Reformation (1354, middle of the life of Wiclif, distant by 516 years from the present constitution, 1870); it comprises the whole development of this Reformation, including its conquest of the new world. (In this respect, compare the symbolic
expression of corner-stone has a true meaning only if this edifice is conceived under such a form that a certain stone forming the corner of it occupies a central position. Now the Pyramid is the only simple solid which satisfies this condition. The inspired text, in making use of this symbol, bears witness in a manner to the sacred character of the Great Pyramid. The symbolic description of the passage, Eph. II., 20, 21, applies here in a striking manner : "You are built upon the foundation of the Apostles and Prophets, Jesus Christ Himself being the chief corner-stone; in whom [ $\epsilon \nu$ and not $\epsilon \pi$ l] all the building fitly framed together, groweth into an holy temple in the Lord."
The comparison of the faithful to lively stones (i Pet. II., 5) entering into the structure of an edifice which is the Church, or the Body of Christ, necessarily recalls here the celebrated words of Jesus to Peter, who has just said to Him in the name of all the disciples (Matt. XVI., 15, 16) : "Thou art the Christ, the Son of the living God;" "I say also unto thee that thou art Peter, and upon this rock I will build my Church " (ibid., 18). The play upon words upon which Sardis rests to establish her authority (even supposing that Peter ever was in Rome), does not exist in the original text, and the two successive words which correspond to "Peter" and
teaching of the horizontal passage and of the Queen's Chamber in the Pyramid).

Thyatira has been praised for her works and her charity (II., I9), but she allowed herself to be seduced by the false prophet (II., 2I) ; the chief work of Philadelphia has been to keep the Word of God (III., 8) ; she has not renounced His name in the midst of persecution (III., 8, 10). The evidence of this word will oblige those who falsely pretend to be the true Church (III., 9) to confess that the Lord recognises for His own (III., 9), and that He loves

[^35](III., 9) her whose principle is brotherly love (Philadelphia) ; this love has a meaning, and is really true only when it has filial love for its centre, foundation and safeguard. The personal certainty of an ever-living experimental fact will render the yoke of human tradition or authority not only useless but even impious in the eyes of this Church. This fact is a door which has been opened to her, and which no human power can shut (III., 8). We shall find it presently symbolised in the Pyramid in the most evident manner (§ 126) as we have already found


#### Abstract

if He said to him, "Thou hast recognised in Me this Rock of Ages foretold by the Prophets; well, I declare that thou also, by thy confession of My name, thou art a stone; thou also dost possess My immutability and My eternity." The fact that this passage concerns the mystery of the formation of the Church or of the Body of Christ, explains the declaration which follows: "The gates of hell shall not prevail against it." The word translated here, hell, is Hades, "A $\delta \eta s$, "the place of souls after death." This sunau aסov evidently cannot be taken here in the poetic sense of powers of evil; this then signifies that the Church will break the bands of death; in other terms, after the question of the formation of the Church, mention is here made of her resurrection and of her rising to meet the Lord. Finally the remainder of the text seems an evident allusion to the immediate relations which will exist between heaven and earth, and in which the faithful raised from the dead will be the ministers in the celestial and terrestrial kingdom of Christ. Such appears to be the most profound meaning of this passage of Scripture; it is nothing less than the revelation made by Jesus Himself to His disciples, of the true nature of the Church, and of its glorious destiny.


the new name written upon a stone, which was promised to the Church of Pergamos (§ II2).

But even now there is an important teaching here for Thyatira and for Sardis. He who, speaking to Thyatira, reminded her that he whose works are perfect walks in the light, and exposes his works without fear to the eyes of the Word, which are a flame of fire (II., 18); who, speaking to Sardis, recalled to her that He only upon earth is the Head of the Church (III., I ; I., 20) ; again, in speaking to Philadelphia, He reminds Thyatira and Sardis that He only has the keys of the kingdom of heaven (III., 7), and that whilst these powerful churches have chosen the wide and spacious way of the world, Philadelphia, which has but little strength (III., 8), has alone found the narrow way which leadeth unto life (Matt. VII., 13, 14).
116. Laodisea. The period of this seventh and last Church extends from a date a little after the French apogee to the second Coming ( 1652 to 2180 , instead of 1635 to 2180). The meaning of the symbolic name Laodicea must be learnt by means of the spiritual sense, like the names of the six first periods. Literally Laodicea, while indicating a phase in the spiritual history of the Church, gives the idea of a people, a multitude of the just; it is clear from the text (III., 17, 18) that a false right-
eousness is meant here; in a similar way, in another passage, the Lord describes the falsely righteous with singular force by the name of just (Luke XV., 7) ; what entirely confirms this interpretation is the allusion that He makes (Luke, XVIII., 8) to the universal falling away from the faith in the last times, times which are precisely those of Laodicea. Now, false righteousness consists in seeking, or in believing that justification may be found otherwise than in the sacrifice of Jesus Christ ; it presents itself under two extreme forms: that of the unbeliever, who has faith only in himself, or the believer, who abandons himself to the practical unbelief of the merit of works.

Yet none of these extreme features defines the spiritual condition of Laodicea; the text declares it expressly (III., I5) : it is neither the cold conscience of the upright, nor the inconsiderate zeal of a conscience dizzy and disordered by the moral struggle; would to God that we could find in Laodicea either this coldness or this burning heat (III., I6) ; in either case this element of conscience would be a force; it would only be necessary to change its point of application ; but, on the contrary, this Church of the last times is in a medium spiritual state, in a lukewarmness (III., 16) which takes away any power of influencing her.

At first sight, it seems as if this intermediate state ought to be interpreted simply as the well-known practical indifference, which allies carelessness as regards the most
vital truths (which it has forgotten to consider in themselves) with the attachment of the animal soul to the observances of a worship. But the text does not authorise this supposition ; for Laodicea knows very well her own will, and boasts of her riches, here necessarily spiritual ("I am rich," III., I7), the fruit of the travail of her soul ("I have enriched myself," ibid.), and which suffices to nourish her ("I have need of nothing," ibid.) ; she believes in her happiness and her knowledge, seeing that it is revealed to her that, far from being that of which she boasts, she is really wretched and blind (III., 17) ; she is not wrong to believe in true happiness and true knowledge ; they exist; but they are both in Jesus Christ : He alone will clothe her freely ${ }^{1}$ with righteousness, and will give her light (III., 18).

From this analysis it is clear that the social medium personified by Laodicea is not characterised either by conscious negation or by inconsiderate zeal ; it is a mitigated state, in which, as in lukewarmness, two opposite poles co-exist and can be recognised: confidence in natural light, and knowledge of revealed truth by the heart inclined thereto; but this state of lukewarmness, though a cause of enfeeblement, is by no means a state of indifference; the mind of Laodicea is strongly attracted by an element which contains the two preceding elements. This is the demonstration or the knowledge of spiritual truth by external proofs, proofs which are rendered universally

[^36]verifiable by this quality of being external, which are therefore, as one says to-day, of a scientific order, and which yet require the insight of the spiritual man either to be discovered or to be measured.

This interpretation is more and more confirmed as we examine the text more closely.

Laodicea cannot be the continuation of Thyatira or Catholicism; doubtless the declaration (III., 17, I8) that she calls herself rich and does not know that she is blind, might lead us to think so; but even if we do not consider that the history of Thyatira has already been traced and brought to the end of the present dispensation(II., 25, 26), the testimony (II., I9) in favour of the works, the last of which surpass the first, as well as the forcible character of this Church would be irreconcilable with the character of lukewarmness which marks Laodicea.

On the contrary, the twofold aspect of mind accords well with the nature of Protestantism, which has aroused the whole man, in whom knowledge has been a consequence of personal faith, ${ }^{1}$ but who may find a stumbling-block precisely in the difficulty of assuring the equilibrium of his inner

[^37]life, of allying poverty in spirit with wealth of spirit. Now Laodicea, which appears in our text next to Philadelphia or the Reformation, appears also to be the natural sequence of it by features which are easily recognized. Whilst the members of the Church at Thyatira have been seduced by Jezebel or the False Prophet (II., 20 ; XIX., 20), and are reproached for errors of doctrine, Laodicea shares with Philadelphia the honour of receiving no reproach of this kind ; it is only wanting in zeal (III., 19). Philadelphia is the only Church which the Lord says he loves (III., 9) ; now, this word is repeated in the remonstrance to Laodicea, and exactly as if it concerned something she already understood (III., 19). Philadelphia keeps the Word of God (III., IO), and the menace to Laodicea is that by her lukewarmness, she who ought to be the salt of the earth and the minister of the Word, will be rejected with disgust as useless, and dispossessed of this charge of the ministry (III., 16). The fact alone that she is exposed to being rejected from the mouth of God proves sufficiently that the elements which compose her spirit form an integral part of the Word. Truth relative to the external world, and spiritual truth form one unique edifice; but it is reversing the order to make science the principle of faith; it is the inverse which is true. Laodicea sins, then, not in that she has sounded science too boldly, but that she has not sounded it suffciently to assign to it its true weight. The lawfulness of
science, and at the same time the principle which should guide it, are consecrated in the address even of the letter; He who speaks to this Church of Science calls Himself the Truth (the Amen; III., 14) ; it is He without whose spirit science can establish nothing with certainty, even without whom there is nothing to seek, because He is the principle of all (III., 14).

The deduction to which we are thus led, and according to which, the phase which now occupies us is specially characterised by universal searching of the truth with regard to external facts, ${ }^{1}$ is confirmed historically. It begins, 1652 (birth of Newton, 1642), with the revelation of the fundamental principle of the physical world (universal attraction), of that world which by the whole of its forces, is the symbol of the spiritual world. ${ }^{2}$ The discoverer of this

[^38]fundamental principle was also the first to make known, at the very beginning of the period, the physical unit of measure (the sacred cubit), which later will throw a light upon the whole of Revelation. From Newton to the epoch of Constitution we are just passing through, the science of the external world has rapidly developed; gradually the knowledge of the other fundamental forces which govern it has been acquired; to the physics of the bodies have succeeded those of the globes. One of these globes serves as an organised body to humanity : a man of genius, Brück, first divines the nature of this organism and discovers the law of the existence of nations. ${ }^{1}$ Almost at the same time, the veil of another truth was rent, concealed from the centuries through which it had passed : modern science, in the person of one of its most eminent observers,
${ }^{1}$ The life of Brück ( $\mathrm{I} 8 \mathrm{I} 8-187 \mathrm{I}$ ) is almost exactly comprised in the Pyramid between the foot of the Great Step of Constitution and the central point of the constitution (1814-1870). (For the meaning of such indications as this, see in the Note, § 30 , a similar remark concerning the life of Newton.) The publication of Magnétisme du Globe (1851), which already contained the first idea of the historic law, is at the angle of the Great Step ( r 850 ). L'Humanité, written from 1865 to 1867 , appeared at the same time as the great work of M. Piazzi Smyth (Life and Work) upon the Pyramid. It is remarkable that we find already in Descartes, who belongs to the apogee of the last historic period (French) the notion of a material circulation of the globe. (Princ. phil., part IV., §CXLVI.)
M. Piazzi Smyth, made known to the world the raison d'être and meaning of the stone book of the Pyramid. These independent testimonies, ready at the epoch of constitution, ought to concur in the establishment of a unique system of truths: the science of Laodicea hastens to become a synthesis, bringing into play all human faculties, spiritual, as well as intellectual ; but the principle of pride, the leaven of domination and authority which slips easily into the feeling of conviction by external proofs, will give the greatest weight to the intellectual element. Therein lies the stumbling-block of this Church. She will seek sight, rather than faith, will confound the adoration of a willing heart with the passion for intellectual research, and, indifferent in fact to the only necessary truth, she will take no interest in it, except in so far as she is able to demonstrate it.

This analysis justifies and clears up the meaning of the word Laodicea, that is to say, that state of universal righteousness of society which characterises the last period of history. It is by the principle from which it proceeds in the least imperfect form of the Church of Christ that this condition is particularly signalised, because it is there we should least expect to find it ; to show it there is to discover everywhere, that false righteousness to which the symbolic word alludes: righteous, the social claims, supported often by the most generous sentiments, and of which we know not whether to condemn or to excuse the
excess; righteous, the consciences of honest, faultless people, devoted to all philanthropic work, nobly enamoured of science and art, and so refined in sentiment that they cannot bear the touch of humility; righteous, a Church composed of saints, made affecting by that sancta simplicitas which ignores the Word of God, and treats as heretics those who make it known to all, simple or not simpleminded people; righteous, finally, the Evangelical Christians, undeceived as to the merit of works, and who, heirs of the word and of science, allow their faith and their works to die in the certainty of truth.

If we conceive that, in such a moral atmosphere, the very power that science gives over nature, by raising the level of material well-being higher and higher, will cause the gold tried in the fire to be forgotten (III., 18), and will turn the soul from the consideration of the treasure which moth and rust cannot corrupt (Matt. VI., 19), it is no longer difficult to comprehend that a profound disturbance of the social state may result from it, a disturbance of ${ }^{\prime}$ which history furnishes no other example, and which is foretold in various parts of Scripture for this period of the last times (Matt. XXIV., 22, 24). A society always becoming more dense, in which individual intellects more and more developed, will be so many growing energies animating the claims of material interest, while at the same time the salt of the earth has lost its savour (Luke, XVIII., 8), this society will be like a system of which the
central attraction is gradually growing weaker, like a machine whose regulator is broken, and which is destroying itself by its own motive force.

The end of the phase of Laodicea, or the coming of the Lord, immediately follows the period of apogee of the last quincentennial period; we have seen that the Deluge also happened at a period of apogee, that of the Noachians. These two fundamental events, one of which begins, while the other ends the history, properly so-called, of postdiluvian humanity (that with which the Apocalypse and the Pyramid are occupied) correspond then to parallel historical circumstances. The desperate state of society, foretold for the last days, has its analogy in the times just before the Deluge: "This same," said Lamech, speaking of Noah, "shall comfort us concerning our work and toil of our hands, because of the ground which the Lord hath cursed" (Gen. V., 29). The comparison which the Lord makes between the last times and those of the Deluge is, from all that, exact, both chronologically and historically : "For then shall be great tribulation, such as was not since the beginning of the world" (Matt. XXIV., 2I) ; "The love of many shall wax cold, because iniquity shall abound" (Matt. XXIV., 12) ; "But as the days of Noah were, so shall also the coming of the Son of Man be. For as, in the days that were before the Flood, they were eating and drinking, marrying and giving in marriage, until the day that Noah entered into the Ark; and knew not until the

Flood came, and took them all away; so shall also the coming of the Son of Man be " (Matt. XXIV., 37-39).

But if the unworthiness of the spiritual state, and consequently of the social state of Laodicea, calls down terrible reproaches from the Lord, the most magnificent of the promises addressed by the Lord to the different Churches, are made to those "who shall have conquered" in this last phase of the history of humanity. An abyss is open under the feet of Laodicea : but this is because to her falls the noble task of uniting into one harmonious whole, all the intellectual, moral and spiritual faculties of human nature, of realising man and bringing him to that perfect stature of Jesus Christ which will crown the second coming. The mission of Laodicea, the supreme end of this present evil world (Gal. I., 4, 5), is to overcome the world as Christ overcame it (John, XVI., 33), that is, to sound in all its depth the power of evil, and thereby to measure her strength. It is necessary that humanity, in the possession of all its knowledge, should learn, as far as in it lies, what has been the anguish of Him who, alone, took upon Him the anguish of all, and an heroic knowledge can bless the hand which, then more than ever, not only heals but teaches through pain.

From this trial, he who comes forth conqueror will be raised to that intellectual and spiritual level of Christ (Rev. III., 2I), even to that throne above the heavens (Isaiah, XIV., I3) established by understanding (Prov. III.,
19) ; from these heights he will rule and contemplate, in the plenitude of life, the magnificent ordonnance and infinitude of creation; he will sum it up in one unique synthesis and will see it in one only thought, which is God.
117. A concrete verification of the preceding interpretation must now be offered ; the first part of this verification rests upon an historical consideration; the second seals the accuracy of the interpretation by an external proof of a numerical order.

First Part. If the whole system of ideas which forms the substance of our researches, and of which the Bible on the one hand, and the Pyramid on the other, have hitherto been the adequate expression, is really well founded, if it is the same with our interpretation of the letters to the seven Churches, then there must be identity, or at least parallelism or agreement, between two of these seven Churches, namely, between the second and the sixth, since the latter corresponds to the Reformation or the Israel of the latter days, the former to the Israel of the Dispersion; and that according to the rest of the theory, the one is the descendant of the other.

It is indeed thus. The substance of the letters varies essentially as we pass from one Church to another. But on comparing the letters to Smyrna and to Philadelphia we find a precise and unique exception. At first sight
analogous, they are in reality almost identical both in substance and form.

To Smyrna it is said, "I know thy works, and tribulations, and poverty (but thou art rich), and I know the blasphemy of them which say they are Jews, and are not, but are the synagogue of Satan. . . . Be thou faithful unto death and I will give thee a crown of life" (II., 9, IO).

And to Philadelphia, "I know thy works . . . thou hast a little strength . . . thou hast kept my word . . . Behold, I will make them of the synagogue of Satan, which say they are Jews, and are not . . . they shall know that I have loved thee. . . . Hold that fast which thou hast, that no man take thy crown" (III., 8, 9, II).

The last feature, not less remarkable than the preceding, from the point of view of the letter, is particulariy decisive from the manner in which it is brought forward. Reference is made without any preparation to the crown of Philadelphia, as to a thing which had previously been given to her, and of which the reader had already heard. Now, among the six other Churches, there is one only in connection with which a crown is mentioned, and it is precisely Smyrna, the Church of the Dispersion: it is promised that if she comes victorious out of a trial which is foretold, a trial of which a "tribulation of ten days" forms part, the croun of life shall be given to her (II., IO). Thus the crown
of Philadelphia is that which has been promised to Smyrna. It was impossible to define symbolically in a clearer and more ingenious manner the filiation, or the identity of the two dispensations which characterize these Churches.

Sccond Part. The second part of our verification, of a numerical order, is given by the measure of these ten days of tribulation (II., IO), which are to constitute a trial similar to an imprisonment (II., IO). In the theory of the identity (or of the descent) of Israel and the Anglo-Saxons, this tribulation or imprisonment has taken place; it is comprised between the epoch of the dispersion of Israel $(-758)$ and that in which the Israel of the latter days, exiled into the north, will return into the land of the East. This last epoch has already been determined: in the Pyramid, it is the extremity, +1882 , of the scale in the Grand Gallery, as the establishment of English domination in Egypt has verified historically in the course of this very year, 1882 (see § 15 ).

Let us now consider the ten days of Chapter II., io. If we are guided by a thought of order, it is evident that day can here only be an aliquot part of the particular period, or time, of 528 years (given by the 7oth week of Daniel), a period which has served as a basis for the interpretation of all the letters. Now, the period, used in the Bible, which in rational order comes immediately after the time is the $\frac{1}{2}$ time.

If we take one day $=\frac{1}{2}$ time of 528 years $=264$ years, we shall have

$$
\text { Io days }=2,640 \text { years, }
$$

and by adding 2,640 to the date of the Dispersion of the Ten Tribes, we must obtain that of the return of Israel. Thus, we have,

$$
-758+2,640=+1882
$$

a result so clear that it requires no further comment.
118. The analysis we have just made of the plan of the Letters to the Churches, completes that of the entire Apocalypse.

The body of the book is, in short, a history of humanity from the Deluge to the second coming of Christ; it is continued into the infinite perspective of the life eternal.

The order of objective facts, properly so called, is subordinate to that of the spiritual dispensation.

In the first rank comes the spiritual history of humanity (the Letters to the Seven Churches). The form of letters addressed to the Churches, under which it is presented, teaches sufficiently that the normal instrument of communication between God and man is, as elsewhere is the whole created woild, a Writing.

In the second rank comes history, properly so called, represented by a sealed book, written within and without
(V. I), that is, containing facts externally visible to all, but which have a hidden meaning (what is now called the philosophy of history).

The coming of the Saviour gives, for the first time, a meaning to all history; for this reason the only one who can break the seals of the book, and, consequently, allow the hidden inner meaning to be read, is a lamb slain; this consideration suffices to prove that the period of the seals terminates at this first coming. From this moment, light has appeared, all is virtually accomplished, history advances towards its supreme end, which is the second coming of the Lord, and its great facts, like so many heralds, announce him without ceasing. For this reason, the period comprised between the two comings is characterised by the symbol of trumpets. The period of the vials opens the kingdom to come.

All history subsequent to the first coming is contained, like that which preceded it, in the sealed book, which includes all history. Therefore all the trumpets are contained in the seventh seal, and the seven vials are likewise contained in the seventh trumpet. As to the history of the Church, it is also contained in the history of the world; but yet it forms a chapter apart, like an element derived from spiritual history, and from history properly so called; for this reason, it appears in a Little Book, offered to the reader in the course of the Great Sealed Book.

Such is the geometric plan of this admirable work, which crowns the Bible and carries it to the remotest limits of time.

The Apocalypse for the future, Genesis for the past. make of the Bible an eternal book. It is an infinite chain, the extremities of which are lost, and of which we can only follow some of the links step by step. But in every age, the eternal guide seems to stoop, and to clothe Himself in a character suited to the intellectual development of humanity. Truth, that we may progressively comprehend it, does not remain behind any demands of the mind. In our own epoch, all science and art, geometry itself comes to trace the narrow way which leads to life, and the Word takes the form of a poem in which æsthetic sentiment implores in favour of the spiritual truth which it envelops with its beauty.
(d) Lower System of the Pyramid. The Descending Passage and Subterranean Chamber.
119. (Fig. V.) The meaning of the Descending Passage yet remains to be explained, in the light of the interpretation which has already been made. This passage, in the Pyramid, extends from S to the side entrance W (this entrance leads by the shaft WGO to the commencement O of the Grand Gallery) ; then by WAB to the Subterranean Chamber BC.
120. Starting from the Deluge D , we see immediately in considering the chronological diagram of these passages, that the chamber BC is contemporary with the region of the antechamber and of the King's Chamber; then, an exact calculation shows that all the remarkable epochs indicated by DWABC form a system quite in accordance, taken in itself, with that of the chambers and upper passages, but entirely displaced with regard to the latter one, being behind in the time by about 120 years. This systematic difference accords with the first impression given by the diagram of all the passages of the Pyramid (Fig. I); the Subterranean Chamber appears to retreat from the King's Chamber, by almost the whole length of the latter. (The southern extremity of the Subterranean Chamber is, horizontally, 366 from the corner of the Great Step, say upon the higher scale 2216 ; now, the King's Chamber extends to 2386. 2386$2216=170$, and the length of the King's Chamber is equal to 206.)

Everything, therefore, appears, as if the system of dispensations, symbolised by the lower system, had been displaced backwards relatively to the upper system.
121. Now the Descending passage represents the progressive fall of humanity, and the Subterranean Chamber, with its last lost passage E , and its jagged and uneven
floor, the last explosion of evil and its final destruction. Let us remember now " the shortened work of the Lord in these days," a chronological feature which ought to be symbolised. Let us bring forward the indication of it given by the period of the seven vials, a period which terminates before the time granted by the Law to the conquering power ( $\$ 90$ ) ; we shall comprehend that the relative displacement of the passages, so evident in the diagram, has been thus arranged intentionally. It expresses a truth which must be discovered.
122. The new humanity dates from the Deluge. Therefore the Deluge D is the era of its history.

The Work of the Lord is "shortened," which means that, according to a law instituted by the Creator Himself, it should have extended further in time.

But how can the Grace in favour of the elect be carried out without violating the Law?

That is possible if the Creator, to whom everything is present, in a manner displaces in time, whilst preserving its virtual value, one of the systems of dispensations (that of the lower passages or of the Lawe with regard to the other (that of Grace) ; and it is this which takes place, as soon as the instant when the first humanity was destroyed and the new humanity commenced is identical, in the Mind
of God, with that which marked the determination of it. Now, we see in Gen. VI., 3 that the determination preceded the fact by "one hundred and twenty years;" that is by the duration which marks the relative displacement of the two systems.

But how is this displacement in time symbolised in the Pyramid ? By a displacement in space, and the identification in question is represented by attributing the same chronological number to two different points of the scale ; that is, that the chronology of the lower system should be computed to start from a certain point X , placed behind D, but which like $D$, has for its chronological value the Deluge.
123. The criterion of the reality of this disposition is perfectly clear; it is necessary, ist, that the Pyramid itself should indicate the new hypothetical beginning X ; 2nd, that according to the determination previously made ( $\$ 90$ ) concerning the end of the period of the vialsmarked, as we saw, by the axis of the King's Chamber, and which, in the lower system, corresponds symbolically with the extremity $C$ of the Subterranean Chamberthere should be from C to X (on the lower scale), the same time as from the middle of the King's Chamber to the Deluge (on the upper scale).
124. We may give the following form to the enunciation of these two conditions:

The middle of the King's Chamber marks 2282.69, and $228269+2528$ (date of the Deluge) $=481069$. On the other hand, the most complete measurements of the Descending Passage and of the Subterranean Chamber, those of M. Flinders Petrie (exact, however, according to the author, only to within 2 or 3 inches, but which we must take such as they are), place the extremity $C$ at a distance from D equal to 4686 io. Consequently, there must exist in the Pyramid, on the chronological scale prolonged beyond D , a point X such that the distance DX shall be equal to $4810.69-4686.11=124.58$.

Now, according to M. Flinders Petrie, the thickness of the outer casing of the Pyramid (at the present time only the débris of the casing exist), a thickness which is computed to start from D , is 124.10 , and this circumstance evidently satisfies both the conditions imposed by our criterion.

The desired point X exists in the plan of the Pyramid, and it is to be found at the distance from D imposed by the theory; formerly it existed materially; it is nothing but the intersection of the chronological scale with the outer casing; this casing after having been constructed, has been completely destroyed, and, it symbolises, by this destruction, better than anything else, the destruction of the surface of the earth, determined in the Council
of God "one hundred and twenty years" before the Deluge.
125. We thus obtain for the distances of $\mathrm{W}, \mathrm{A}, \mathrm{B}$, C to X :
and by subtracting 2528 (since X has for its chronological value the Deluge),

$$
\begin{array}{cccc}
\frac{\text { W }}{1293^{\prime} 175}{ }^{1324^{\prime} \cdot 144} & \text { A } & \text { B } 10 \cdot 857 & \text { B } \\
1956 \cdot 511 & \text { C } & 2282 \cdot 185 .
\end{array}
$$

Now, these numbers reproduce: W, the fundamental epoch in the history of the Church marked by the step KL in Fig. IV., that is the constitution of the Reformation signalised by the birth of Wiclif (1324) ; A, the centre of the phase of Apogee of the quincentennial period which that constitution begins; B, a date yet to come in the phase of preorganisation which we are soon to commence ; it is point $Z$ (Fig. III.), placed 20 years from the central date of preorganisation E (we remarked, in § 2 I , that this point E corresponds to the centre of the Council of Constance, and $Z$, to the centre of the Council

[^39]of Basle) ; C, the end of the period of the 7 vials, or the centre of the King's Chamber.

The corresponding numbers given by the upper system are
$1303 \quad 1324 \quad 1609 \quad 1956.95$ and $2282 \cdot 69$.
126. The symbolism is remarkable; the fact, so telling, that the conduit OGW leads precisely to the dawn of the Reformation, is decisive [the step KL and the entrance W are both exactly fixed by the birth of Wiclif (1324)]. This fact, one of the most conspicuous in the general diagram of the passages, clearly shows that the Reformation brought, with the Gospel and personal faith, not only the true, but also the only principle of salvation. The entrance $S$ was sealed. Having reached W and not being able to return by the road already traversed, which is the course of time, we must either continue to descend, without any other end than perdition, or seek an outlet by the freely open entrance W.

It is the door open to Philadelphia or to the Reformation (Rev. III., 8).

The very shape of passage WGO (not destined to be measured, any more than that of Davison), expresses the phases of the spiritual life of him who tries this new road. He retraces his steps, rising little by little; and at first it seems to the explorer that his own efforts will enable him
to attain the goal. But the incline becomes steeper; exhausted, he stops, on the level of the Law S , in the resting-place $G$, which seems to present itself as the reward of the work he has just accomplished. If he remains, however, in this illusive resting-place, he dies, for GO is insuperable. To save him, some exterior succour must raise him towards Heaven ; and this power which secures his salvation is the death of Christ; for starting from the birth of the Saviour, the centre of the orifice O measures 34 .
127. Outside this narrow way, humanity continues to descend ; then a sort of level is established in the phase which is begun by the last spiritual apogee. This is also the epoch at which the Gospel, commencing the conquest of the whole earth by that of the new world, after a century of active persecution, everywhere spreads its beneficent influence ; like oil upon the waters, it allays the tempest of evil by softening manners, and causing the social principles of right and equity to germinate. It is the period of relative and factitious calm in which we live. But the Scriptures, as well as the Book of Stone, as well as simple inductions from the observation of facts, declare that this interval of peace will be followed by a violent reaction, surpassing in intensity and in disastrous consequences, all those reactions already recorded by history,
which have been presented only as omens of the final tempest which shall be let loose.
128. To sum up, all the lower system is the symbol of the irremediable fall of humanity; the Church is formed of those who are freely saved by the blood of Christ, and personally called by the Gospel, according to the principles of the primitive Church and of the Reformation (WGO, Fig. V.).

As for the upper system, from $S$, it is the history of the chosen people of Israel and Judah. But its teaching is not less terrible for Israel and Judah than for the nations who occupy the Court of the Temple. The phase of material power which nations call their apogee, is, during the quincentennial period of the domination of this chosen people, a dark passage (Fig. III., KP), in which hatpy (Daniel, XII.) are those who reach the end and penetrate at last into the King's Chamber. This apogee, like that of the people who, in the days of Noah, called down the wrath of God, will be followed by a frightful destruction. The epoch of organisation (pre-eminently an epoch of inspiration) and the present epoch of constitution ${ }^{1}$

[^40](Fig. III., FK and G), alone, are times of spiritual glory. But already the Great Tribulation, during which the Church is to be preserved (Rev. III., Io), commences in $Z$, at the end of the phase of preorganisation (Fig. III., DF), at the moment when the two Witnesses, the true Israelites (John, I., 47), are about to raise before the world their Testimony to the Eternal. Scarcely has this testimony, which takes place during the first gloom of the Tribulation been given, than the witnesses are annihilated and the world rejoices (as far as P ) over their manifest ruin. How, during the rule, and at the maximum of the power of Judah and Israel, are Judah and Israel annihilated ?

The Beast of the Sea, the eighth king, to whom was given the power of fulfilling forty-two months (Rev. XIII., 5), will terminate them in L (Fig. III.) ; but the spirit of confusion, that of the Babylon which is seated on the Beast (XVII., I, 5), will it not be transfused, the abomination predicted by Daniel "standing where it ought not" ["let him that readeth understand" (Mark, XIII., 14)] ? and will it not be true for the second time, that He is come unto His own and that they have not known Him ? ${ }^{1}$

Lastly, whilst the world sleeps in a false peace (Fig. V., $A B$ ), under the impulse of this last terrestrial reign, will not the Church itself sleep, in the pride of its opulence and in the gloom of the Subterranean Chamber? And is

[^41]it not to this dead Church of the last days that these words are addressed: "Because thou art lukewarm, and neither cold nor hot, I will spue thee out of my mouth. Because thou sayest, I am rich, and increased with goods, and have need of nothing ; and knowest not that thou art wretched, and miserable, and poor, and blind, and naked?"

This signifies that the true Church will remain, during this last period, as it has always been, a fraction lost in the mass; that its reign will only commence with that of the Lord, and that the task accepted by the true Israelites as chosen people may only be accepted with fear and trembling, because much will be required from those to whom much has been given.

## CHAPTER IV.

CONCLUSION.
129. In this work it is demonstrated, by external proofs having the force of numbers :
ist. That the literal chronology of the Hebrew text of the Bible is rigorously exact, in agreement with Brück's historic law, and identical with the chronology of the Great Pyramid ; that this Pyramid, in accordance with the theory maintained by M. Piazzi Smyth, is a Hebrew, and not an Egyptian monument, and, like the Bible, a work of Divine inspiration; that its prophecy and the prophecy of the Apocalypse embrace the whole history of humanity, from the Deluge to the latter days.

2nd. That the Anglo-Saxons are the descendants of the Ten Tribes of Israel.

3rd. That the Reformation is based upon the true Christian principle, and virtually continues the Apostolic Church, whilst Roman Catholicism is emphatically condemned by Scripture.
130. It seems impossible that external proofs so evident should not convince of their error those who deny the

Divine inspiration of the Scriptures, if at all they condescend to examine these proofs from a scientific point of view. But, whilst waiting till the light dawns for them, as it has already done for others, these proofs are of the utmost value to Christians: sight is here a blessing which strengthens their faith, and during the short course which may yet remain to them, it heralds that bright day "when there shall be no more death" and "when God shall wipe away all tears from their eyes."


## REFLECTIONS OF THE AUTHOR.

The system of ideas which has just been perused was conceived and developed in a very short time, about a year ago ; ${ }^{1}$ it is given here as it presented itself then, with that character of increasing verification which at every step restricted the region of doubt in the most surprising manner. It accords with the nature of the subject to end by making some reflections upon the reaction which such a fact ought to produce in the intellectual atmosphere of the present time. With regard to this, the author has but little expectation: he may, however, instruct himself, at the same time as the reader, by calmly estimating the chances.

The minds to whom this fact is presented may be ranged under three categories: the first is the scientific mind properly so called; the other two respond to the two great methods of interpretation and application of Christian principles which constitute Catholicism and Protestantism.
${ }^{1}$ The end of October and the beginning of November, 189 I .

## I.

For men of science truly faithful to method, scientific doubt is not vulgar scepticism ; it is rather the impartial admission of all the possibilities. These are at first classed each and all; reserve is applied only in the judgment which is afterwards formed concerning the reality or non-reality of the objects which they presuppose. There are few things strictly absurd, but there are few minds capable of not confounding that which displeases them with that which is absurd. Only to minds of this stamp, however, the present work may be offered with confidence: in general, they will doubtless be inclined a priori to pronounce the thesis it defends eccentric and improbable; but they will define the eccentricity; they will see that it simply points out that the subject does not fall in the centre of the actual circle of their ideas; able to study the correlation of the facts, setting aside any preconceived ideas concerning their special nature, and admitting that they do not know everything, they will examine the proofs, and if they find that the correlation actually exists, they will not fail to recognize it openly. They will not even be arrested by the consideration that, this correlation being recognized, the import of its consequences will need no defence.

But apart from these geometrical minds, which are rare,
a great concourse forms in science, so to speak, a church, having its dogmas, from which it is scarcely possible to deviate without becoming an object of suspicion. It is this science which, for example, on the subject of the great problems of the origin, the indefinite antiquity of man, the impossibility of the universal deluge, writes "sc:ence has demonstrated," when experts in the matter know very well that science has demonstrated nothing at all. It is not particularly clear what has been gained by this new dogmatism ; distinguished minds support it no doubt by their authority and by their real science; as to the crowd of the faithful, they believe themselves endowed with the spirit of research because they belong to the Church which bears this ensign, absolutely as formerly they believed themselves Christian because they belonged to a Christian Church: but in reality, in the one case as in the other, they remit to others the fatigue of thinking, and only see the truth by proxy. It is always the same spirit: it has only changed its mode of exercise. The superstition of faith has given place to that of incredulity; the good folks who believed in the stories of the saints believe now in the legends of our Renans. In those days they believed themselves pious, now they think themselves reasonable; that is all the difference. We may therefore fear that from this Church of free examination, it may be perfectly useless to demand an examination.

## 2.

The tendency of the mind which we have just described, dismisses all consideration of sentiment, and in these happy days when the soul has become an object of suspicion, is forbidden to obey any impulse whatever of this order. In the presence of Roman Catholicism, the situation is very different. Criticism feels constrained by respect for some thing great, which it perceives therein, and which it could not pardon itself for wounding; nevertheless, frank speech is all the more necessary if the criticism is to be clearly comprehended, and because a bold freedom is alone worthy of the subject.

The fact established in our study is the most formal condemnation of the Papal Roman Catholic system. But this system is like the vestment which clothes an admirable school of noble virtues, so intimately, that, as in the fable, one cannot "touch the mantle without making the flesh cry out," and the involuntary brutality of the impression produced will plead always more strongly than the fact that the intention was good and well founded.

Such is the situation and its difficulty. Whilst in every other case to present a fact is permissible, and binds to nothing, here, by an astonishing identification of a human form and a divine foundation, if this fact is unfavourable to that form, its divulgation becomes a moral fault.

To bring to light the identification in question is to establish responsibilities. We say it then clearly; supported, as upon a false basis, on the confusion which this identification engenders, and so much the more powerful as it seduces the mind by the logic of its deductions, Roman Catholicism and its geometry fear nothing so much in reality as light thrown upon their principle, nothing so much as the redoubtable geometry of the individual religious conscience, or than the Gospel. Catholicism stands before the Gospel like a system before true science: it gives itself out as being the latter, otherwise it would not be esteemed, but it trembles lest this true science should become popular, and dispense with it. It professes to be the most decided supporter and defender of the Scriptures; that is a fact ; but it is also a fact not less patent, that it hinders and condemns the diffusion of them by every possible means; and not only of the Old Testament but also of the New ; of the Gospel, the words even of Jesus and the Apostles. Now what sensible man will believe that, ardent as they are in the Propaganda, the Catholics, if they held in their hands a means so powerful as the testimony of the Sacred Books in favour of their Church, would not spread these books broadcast among the masses, as the Protestants do, who have nothing to disguise ? And for the same reason, who can help concluding that if they display an equal ardour in condemning this diffusion, it is because these books which they say are
their support, but which they dare not show, condemn themselves. Observe carefully the bearing of our observation : the question is, over all, one of fact, which exists fatally even for those who would excuse or justify the equivocal attitude of Catholicism with regard to the Bible. Whatever may be the reason, it is a fact that the knowledge of the Bible is fatal to Catholicism. ${ }^{1}$ Now this is a crushing fact. Experience of it was gained upon an imposing scale in the Reformation, for assuredly this monkish quarrel did not take unawares the many excellent spirits who have taken part in it since, and who have had time for reflection; if the Reformation succeeded, it was not because it invented a new system, nor solely because it brought to light the ignorance of the Christian world of

[^42]the time ; it was simply because it opened the door to a knowledge already existing, and this knowledge set free, has done its own work irresistibly. In our own days the history of Luther is reproduced every time a Roman Catholic discovers the Gospel : it is for him a new world; when he understands it, his conscience obliges him to make it known to others ; but immediately, according to her systematic spirit, the Church forbids him to do so, and thus forces him to break with her. When she is strong, she uses violence; when she is weak, she solicits silence, and at length it happens that she prefers an unbeliever who is silent to a Christian who proclaims Jesus Christ.

It is hardly necessary to observe after these remarks that a study which, Bible in hand, brings out so clearly the true character of the system of the Roman Church, cannot hope to be discussed, or even faithfully read, by the ordinary reader whom the teaching of this Church has fashioned; its only chance is to fall into the hands of some true men of science ; but, however painful it may be, I cannot refrain from a reflection here: Catholic science, by some of its authorised mandatories, has been favourable to the theory of the Pyramid as a document of Divine inspiration, so long as nothing was drawn from it but proofs in favour of the authority of the Bible as a revealed book; thus pledged, what will it do on discovering that the remainder of this document, by it declared Divine, is the most formal condemnation of Roman Catholicism
itself? Would silence be permissible and would it not be equivalent to an acknowledgment ?

The thesis which I defend, will doubtless be condemned in spite of any reason, and that without mercy, by many sincere Christians; either from deception in their midst, or from an acceptance, thoughtful, but founded upon documents at second-hand, they confound in all sincerity as of the same authority, spiritual truth and a human form in which it has been dressed, and consider that to cast a shadow upon the latter is to offend the former. It will be condemned perhaps in virtue of the same fatal a priori, by some exceptional men whose character and science none can esteem more highly than I do. Before these I can only protest that there is here no passion : that if obliged to speak, I open the discussion boldly, I open it honestly, demanding a response to my arguments and taking the ground of external fact ; I ask them to agree that, for men not of sentiment but of reason, Roman Catholicism considered in itself as a system, can be discussed coldly, without any breach of Christian feeling, in the manner of an external fact ; I ask these men of science to make provisionally, as by way of a mcthodical doubt, a momentary abdication, perhaps heroic, of the form in which their mind has hitherto been pleased to repose.

As to those pitiless spirits who, deviatin: from faith into fanaticism, kill in themselves even the possibility of discussion, consider their revolts against evidence as so
many acts of faith, and would persuade others that it is dangerous to draw even from the well of the truth which they profess to defend, we agree with them only in one thing: they disarm him who has nothing but reasons to oppose to them.

## 3.

Some objection may perhaps be raised by evangelical Christians; they fear a form too concrete, which, by attracting the sight, may turn faith from its true object. I reply, that conciliation is by no means impossible in this respect. Without doubt, the one thing needful is to be attained, independently of all tangible proof, by an internal proof-a proof not only within reach of all, learned or ignorant, but alone the true one-being not an intellectual deduction but a fact of living experience. I will own then, if it is desired, that the objection points out a danger; but I think a greater would be to compress or to limit the need of precision and of clearness which is legitimate, and natural to the human mind. Now, it is evident by merely reading, that the Bible considers, as the end of history and its fulfilment, an event which it announces without ceasing (the second coming of Christ) ; moreover, all the historical dispensation which is attached to this event, is presented as determined numerically, and possible to be known by us clearly, as the numbers are given. There exists then in the

Bible a mathematical system to be determined: this is a fact of immense import, which we cannot escape; we are invited to search out this system; we are assured of its. discovery, when, in accordance with scientific rule, it satisfies all the data of the question. Let us suppose this assurance acquired: this system can no longer be a subject of simple speculation; it will be a duty to teach it even in the Church; and if a stumbling-block should yet remain, it will be found only in the manner of presenting instruction in itself henceforth unavoidable. Moreover, the Bible will be the teacher and will give the secret of the method; what is its whole teaching if not the admirable model of a spiritual order, enshrined in infinite conditions of space and of time ? and who could yet assert that these multifarious conditions of the drama, infinitely varied and fleeting, conditions imposed by our finite nature, will ever, in this divine Book, turn the spirit from an eternal thought which is its only object ?

## 4.

In recapitulating the chances, if we except Christians personally instructed in the Scriptures, it must be owned that were it presented by the angel of conciliation himself, the fundamental truth contained in this work clashes too much with opposing interests and feelings not to be everywhere very ill received. It will appear ridiculous to some, to
others heretical and blasphemous. Perhaps some philosophic mind, calmer and less prejudiced will grant that all this is possible, that this philosophy of history, even with its Israelitish descent, found again in the Anglo-Saxons, however unexpected it may be, has in its favour proofs which agree, and form a system astonishingly bound together; but is it not to be feared that he may refuse even this partial testimony, at least he may keep silence on seeing whither it leads, on perceiving that to recognise these proofs is to allow that the pantheistic and materialistic conceptions of what to-day bears the name of science are sapped to their base, that it is to recognise the reality of providential action, that it is to say that the Pyramid of Ghizeh is nothing less than an existing miracle, that prophecy and supernatural Christianity are true, that man is lost, and has no salvation to hope for, but in the blood of Jesus Christ. One goes away sad when one has such great possessions to lose. If the Pyramid has the same enemies as Christianity, its case is desperate. This may be a consolation to those who fear to see external arguments substituted for faith; we shall never see, unless we are able to believe.

## 5.

The whole situation is summed up in a question of method. From whence it comes, the obstacle to im-
partial examination lies in the non-observance of one elementary rule, that which enjoins us, in approaching a problem, to set aside all a priori, and to establish purely and simply the correlation of the data of the question without allowing ourselves to be influenced by their particular nature.

Negation a priori of the supernatural, will prevent rationalists from being sufficiently men of science to consider calmly the concurrent facts which render the Bible an organic whole, admirably bound together; and affirmation a priori of a particular system which admits the supernatural, will make it equally difficult for Catholics to approach without apprehension, and consequently without prejudice, the study of this same whole, taken in itself and exactly as it is.

To the same fault of method we must refer an objection which will be aroused in many minds, proceeding from an a priori of quite another kind, that of æsthetic sentiment.

If the abstract idea of prescience and pre-ordination is hard for the reason, it becomes repulsive to the taste by the concrete form in which it is here clothed. One will find shocking in its narrowness a conception of history in which everything is foreseen, calculated and ordered, in such a manner that all the labour and struggles of humanity are inscribed upon a prophetic stone placed on the threshold marked by its first steps. I know not what cruel irony will be attached to the thought of this logogriph which
directed the world, and before the geometric coldness of which the moral value of its enthusiasms and of its sufferings seems to fall useless and humiliated.

With regard to the concrete and pitilessly definite character of the conception, if one evil can compensate for another, we should gladly observe that here we have but one particular case taken among an infinity of others. Everywhere in science it is not breadth but narrowness which is proper to the truth. There is nothing so narrow, for instance, as Newton's law ; if before the Creation, some Garo, ${ }^{1}$ a transformist, had been called to council, he would no doubt have proposed, as alone worthy of an infinitely fertile nature, the always unstable process of laws linking themselves into each other without beginning or end, eternally recommencing their indetermined undulations; the reality, however, is far from this breadth of view. A formula of four letters contains the science of the heavens. What narrowness too in the gate which leads to life! The categorical imperative of the conscience, the certainty of the incompatibility between the holiness of God and the $\sin$ of man, and the absolutely personal acceptance of gratuitous pardon : all the depth of God and of the human soul is hidden in the clearness of these three ideas. A concrete and precise form under which the truth is mani-

[^43]fested in a given case, far from being contrary to order, is, on the contrary, in the universal order. ${ }^{1}$

If we observe now that in spite of all, a singular grandeur is imprinted in these narrow truths, we shall find a solid reason for it. Breadth of view has long since exhausted the little it had to tell, while the simple principle remains eternally youthful in its inexhaustible fruitfulness; the reason is that the infinite is in it twice; in power in the principle itself, in effect in its consequences; it is thought which realises, it is the Word which creates. From this duality there results under a thousand aspects throughout the universe, a piquant and profound opposition between that which is determined and that which has no limits, the whole nevertheless bound together in unity. But the artist or savant who would separate the poles of this antinomy takes the wrong road. He forgets that in this music and this poetry of the world, as in true music and true poetry, the charms spring precisely from the singular union of an ideal thought and a mathematical element; here as there, when the question has been to create, he who would have inclined too much to one side

[^44]or the other, however little it might be, would have missed his point and his utterance would have failed; and yet the work was bound to be perfect on every side; it required to be at once fin et géomètre; ${ }^{1}$ but in art, as in science, the real difficulty has always been, even in the days of the Creation, to prove genius, in the using of clear ideas.

In other words, æsthetic sentiment can accommodats itself to the narrowness and to the concrete character of the truth, provided it embraces at the same time in spheres without limits the multiplicity of its consequences; the craving for the infinite, which is the grandeur of the soul, must not be allowed to deceive the mind by presenting to it the vague as the character of the ideal.

If the Pyramid is discredited, the whole Universe is no less so, for therein all is calculated and bound by narrow conditions. We speak of moral worth ; but for humanity as for the isolated individual, moral worth consists not in choosing the way, but in yielding to duty in that way which is imposed upon us, and he is not a slave who is slave of the truth. Why, then, should there be no sympathy for a system of conditions intended to concur in the development of this humanity, to appoint to it one route, with stages judiciously fixed, among an infinity of others in which it might go astray. Why should æsthetic sentiment, for a moment fretted by the apparent narrowness of the means,

[^45]not attach itself less to the consideration of these means, taken in themselves, than to the harmony and fitness which exist between their nature and their end ? Doubtless theidea of finality will intervene here; but this idea belongs to the domain of that æsthetic sentiment, and it is very true that if the true and the beautiful are indissolubly united, their true relations can only be observed from the heights of good.

It remains, then, to take this standpoint, and, dominating the whole subject, examine the reasons for the existence of the Pyramid, and for the part which it plays, in the order appointed for the progressive teaching of humanity. This order is by its very nature an æsthetic element, and as such, is here an element of criticism.

Let us examine it a little more closely, and, making a new thing of an old one, rehearse, from the point of view of finality, the fundamental features of the ancient tradition which is verified by our solution.

If this solution presents the development of the terrestrial life of humanity as a phenomenon of an order of greatness restricted as to space and time, by this characteristic, it harmonises well with the very humble place which the earth occupies in material creation. The great phases of this development have their limits fixed by those of the transformations of the surface which is the seat of it. No more than 6364 years elapse from the creation of man, about the epoch of the coincidence of the
line of the equinoxes and of the great axis of the orbit, to the second coming of Christ, that is to the commencement of the Kingdom. ${ }^{1}$ Of these 6364 years, 1656 being accomplished, the for-ever-memorable sign appeared of the powerful and inexorable character of the justice of God. The first humanity was destroyed by a physical revolution, symbol of a spiritual reaction which it had itself provoked. It disappeared in the transformation of the terrestrial surface constituted by the definite establishment of the relief, which was characterised by the raising of the great Asiatic-Australian and American $S$ meridians diametrically opposed to each other.

The population increases; men disperse themselves over the surface of the globe, the configuration of which was completed by the Deluge; Noah in preserving the chronology of the Old World, makes known to us the quincenterinial period by which the life of humanity is regulated, a period which will serve as a rule in the subsequent development of its history, and which will mark it off by ten apogees of nations.

These new nations are formed precisely at the epoch

[^46]of constitution which follows the phase of decadence and corruption characterised by the tower of Babel ; the latter is the monument of confusion, destined to remain throughout all history the type and the testimony of the sacrilegious usurpation of the Divine by the human. But almost simultaneously, that is, on the threshold of this history, and as if in opposition to the monument of confusion and disorder, all the future acquisitions of humanity, scientific as well as moral, are summarised in advance, with this history itself, in an indestructible archive, ${ }^{1}$ a stone of testimony of the Divine order.

But why has this archive remained sealed, and why is it destined to be read only at the end of time (that is, at the present epoch) ?

This remarkable disposition, together with all the external

[^47]facts of history, is only the delicate medium of a progressive teaching destined to bring man nearer to God.

This teaching of humanity must follow a course founded upon the nature of our mind, or, as it would to-day be expressed, must conform to scientific method. According to this method, science, of whatever order it may be, begins by an act of faith and only ends in sight. ${ }^{1}$ On the other hand, we see the spiritual world more nearly than the outer world, and the mind only reaches the latter through the former. Therefore what humanity ought to learn first, is spiritual truth ; by the promulgation of the Law, it will learn the Holiness and Justice of the Most High, and its own position of moral degradation ; through Grace it will learn the Mercy which is above all works, and the absolute liberty of Him who, all powerful, has given Himself. Certainty will thus enter the mind through the soul, and knowledge through gratitude, which is only an acknowledgment of the truth.

The science of the material world will not come until afterwards; it will be only a verification. But this verification ought to be decisive, because it is destined to destroy the obstacles accumulated by the human mind upon the royal road of moral truth. For this reason it will be clothed in a special and concrete form, like that,

[^48]the discovery of which forms the subject of our study; it will, as it were, bind with one tie truths of the most different order, and will symbolise by a sign which demonstrates itself by showing itself, the existence, among all the faculties of the human mind, of a unity and an order which have their root in God.

Progressively, and in their rational order, all the factors of the problem have thus been brought into operation; and in the noblest manner this narrow geometry which was arraigned shall, by removing the depressing slavery of purely external science, have constrained the soul to truth through moral liberty.

## 6.

If these reasons are considered too philosophic to be perfectly satisfactory, in the sense that it is no consolation to the spirit to be forced to admire its prison, and that it feels itself made for higher liberty, we do not deny this, in defending against all and every one dogmatic determinism. Perhaps upon this point all our theology might be reduced to the following reflection: The whole desire of those who believe in God should be, that God Himself would produce in them thought, feeling and will; and who could even conceive the complaints of those who do not
believe in God, since they themselves do not know upon whom to lay the blame?

But without trying either to console or to convince, owning that lassitude and emptiness of soul result from the contrast between the unfathomable greatness of the Divinity, between even our own greatness, and the strangely special nature of the means necessary to direct our ways, taking even an argument from the sorrowful fact of our insurmountable intellectual difficulties, very far from contradicting those whom the situation drives to despair, we agree with them, but we would draw from it a deeper and more useful lesson.

Nothing, we say, is better calculated to raise us than our misery. Without doubt, the framework and the means are narrow; it is not only necessary to grant this, it is necessary to rest in it. Certainly this system of conditions appears to have the character of an inexorable fatality; itself regulated by number, weight and measure, its seat is the surface of a globe, whose regular changes are mathematically calculated beforehand, whose periods of movement, though the earth be only an atom lost in the universe, embrace spaces in comparison with which the entire human drama is but an imperceptible point.

But this very narrowness is a lesson, and it is not without reason that nature confounds us. Thereby this magnificent writing recalls us to ourselves; by undeceiving us, by turning our vision from its splendours, nature itself
teaches us, that it is not our object : and, unlike Augustine who, contemplating the heavens from the garden of Ostia, after having traversed infinite spheres and exhausted space, penetrated at last into his soul, we, repulsed by nature and science, are forced to take refuge in our souls, and thence to discover heaven.

This is God's way, and it is not the least of His benefits to have made man poor, in order that, undeceived by science concerning the greatness of his condition, he should comprehend that his dignity lies in thought, and should prize only the riches that will never perish.

The science of to-day teaches exactly the contrary, and thereby exercises a deleterious influence, more fatal to individual minds than a superficial glance would lead one to suppose. By drawing man out of himself, by constantly attracting his mind to the universe, it has the effect of hindering deep thought. From modern science, humanity learns of its indefinite antiquity, and of a duration to come so illimitable, that the clear notion of an end is practically foreign to it, and to assign to this end, an epoch comparatively near, would seem a ridiculous dream. Humanity advances towards the ideal of an intellectual and material prosperity to which its own power shall raise it, whilst the mind will disengage itself more and more from the superstitious swaddling clothes of a belief in Providence. It is thus that the discovery of the very humble p'ace which the earth occupies in the universe, far
from calling out a powerful return to God, has only served to awaken pity for our fathers; and yet their science, less favourably portioned out, concealed a truth within an error when it resolved to place the earth in the centre of the universe ; they were nearer than we to the centre of all, and their souls were right in refusing to abdicate.

## 7.

Such is the lesson which we may hope will be accepted by those who have rejected the others. But assured as they are of a refuge, nothing should now hinder them from examining more nearly the question of fact which provoked their repugnance; for there is true pleasure in disdaining science only when one knows much; and if we despair, it is at least as well to know the reason. This question of fact is the very essence of our work; it is also the pole which should attract and bend all opinion. A priori, systems or exceptions which may serve as arguments to the diverse tendencies which to-day appeal to our minds, all ought to be tested by this point of fact.

The prophetic and chronological plan of the Bible belongs to an organic whole, mathematically defined, of which the units of measure are borrowed from the system of the world, and which is found inscribed by geometric
means, in the Great Pyramid of Gizeh. It is a fact, that science now possesses proofs drawn from astronomy, from geodesy, from the physics of the globe, from historical chronology, and lastly from the comparison of the metric data of the Bible with other metric data, determined by a standard of stone which is capable of furnishing repeated verifications at the present day, not only demonstrating the truth of the Scriptures, but fixing their exact interpretation. This fact is the more remarkable that it is produced at a time when the average tone of opinion considers that a new light has demonstrated the inanity of this pretended heritage of the human race, and proved the falsity of its record; when hesitation and compromise are apparent even in the minds of the most ardent defenders of revealed truth, who think of nothing less than of burning the body in order to save the soul of the doctrine.

But neither science, nor history, nor the Bible can henceforth be falsified; the Pyramid exists, it may be measured anew; even at present it has been measured with precision, under contradictory conditions which render its testimony unexceptionable ; first, before its prophetic character was suspected ; afterwards, in a hostile spirit, under the auspices of one of the most powerful official scientific societies in the world. The last measurements have confirmed the first, and verify even better the astonishing correlation of which we speak.

The geometric force of the result once acquired, it transfers itself entirely to the spiritual truth which the facts contain, and which is the reason for their existence ; it is the demonstration by science of the reality of the Redemption, of the certainty of the magnificent hopes of regeneration spread throughout the Scripture: regeneration of humanity by the second coming of Christ; regeneration, by the resurrection, of those who, feeling their own irretrievable moral fall, await Him as their Saviour ; and that, not in the vague future, but before three centuries from the present epoch shall have passed away.

To hope that certainty of such an order might become popular, that the conscience of nations might be aroused through that of individuals, that this certainty gives thus an element of direction and weight to political and social movements, which would at the same time be an element of morality, of consolation and of hope-to expect all this, would probably be Utopian ; ${ }^{\mathbf{1}}$ and yet there is no question here of vague speculation: it concerns positive elements, which might be introduced into our teaching, and the consequences of which would deduce themselves in every mind. The concrete utility of certain of them stands out conspicuously from a teaching point of view ; such is

[^49]the Law of history. The knowledge of this law ought to be introduced into our schools immediately, were it only as a simple empirical rule; in a few lessons it would teach the pupils all the great lines of general history, and by it they would at once find the chronology. A manual explaining the law, and summarising it in several synoptical tables is yet to be made. If it is not adopted in official teaching, it will no doubt be used in private teaching; a table summing up the law in a figurative manner ought to be produced on a large scale in the school-rooms, and in examinations the fundamental question in general history ought to be the law of the life of nations and of their succession; Brück's Law should be asked for, as in astronomy they ask for the laws of Kepler.

The mere idea of the life of nations, clearly announced, would produce profound results in every mind ; the professor would find his noblest task in interpreting it, in showing that science warns nations of the crises through which they must pass, in order that by the use of their moral liberty they may be prepared; that they may ward off the fatal effects, and learn to aid each other, not to accentuate in a' brutal manner, by violent reactions, the consequences of the fatal predispositions imposed in their midst. No doubt humanity, taught by science, may thus learn later to rule the terrestrial organism which serves it as a body, and the conception developed in
this work in no way contradicts the necessity for such an ideal. ${ }^{1}$

The teaching of the historic law is, therefore, the first practical and clearly-defined reform to be carried out. There will then be found scientific minds independent enough to point out the agreement between Biblical chronology and this law; free enough to approach the examination of the Great Pyramid calmly, to declare that in fact there is also literal agreement between the chronology of the Bible and that of the symbolic diagram of this monument, the scale of which is borrowed from the terrestrial globe. This chronological agreement, which all can verify, will appear as an overwhelming external proof of the truth of the Divine plan wrought out in the Scriptures. It will then be owned that no combination of circumstances could have been better conceived, better suited to our imperious need of seeing, that a more invincible demonstration could not have been made than by the fact of an identity between the Book of which our

1 The mysterious but certain event of the second coming of Christ will certainly be such determined fact as was the first coming; but whatever the physical circumstances which accompany it, we may rest assured that they will form part of a pre-established order, and that definite conditions imposed upon humanity by its terrestrial organism will not cease to exist. In other words the victory of the mind will consist not in annihilating the body, but in bending it to conditions of normal activity, and the second coming, like the first, will not destroy the law, but fulfil it.
sophisms ${ }^{1}$ contest the authority, or the authenticity, and an indestructible document which gives to the past, the tangible reality of the present ; and if we note the fact, that this identity is in a manner cemented by all that is least contested and most exact in modern science, so that the rapid and brilliant development of it during the last three centuries, or since the return to the Gospel, seems to have had no other end than to assure us more invincibly of the value and the certainty of that Gospel, we must confess that if truth has ever been proved by external evidences, it is the spiritual truth contained in Holy Scripture.
${ }^{1}$ The present demonstration is sufficient to justify our right to speak thus. It cuts the knot by a direct process, by the simple statement of a fact which is the axis of the question, not by estimates and approaches founded upon points of detail, the results of which, emanating from equally competent authorities, destroy their value by their want of harmony. I had occasion in a previous work ("Etude sur le Système des Forces du Monde Physique," p. 553 [Mem. Acad. Royale de Belgique, Vol. XLVIII.]) to offer some remarks upon the subject of the historic fact of the Deluge, and upon the data of Egyptian chronology. I refer the reader to them. The reason why the results do not agree is very simple: to declare by an a priori which is not legitimate, the worthlessness of the testimony of the Bible, is as if, when seeking the probable value of an observed magnitude, we should grant little or no weight to the observation which is perhaps the best. It would then not be astonishing if the mean result were worth nothing. The object of the present work is to prove the falsity of this a priori; and as the demonstration which is brought forward is direct, every other solution will be first bound to refute it.

## 8.

These deductions are consoling; they confirm in our souls by outward vision, the truth that the inner eye had already read in the conscience; they are especially calculated to strike those who have at first attached themselves to Christianity as to a truth independent of finished means by which it has been manifested upon earth; seeing, for example, that the material facts reported by the Bible being supposed to be false, yet by this Bible, sin, separation from God, and the necessity for free salvation are none the less clearly demonstrated. Perceiving this, they have been able boldly to reconcile themselves to all the objections and doubts offered by the science of external facts, finding even extreme pleasure in having nothing to fear in so great a danger, and waiting patiently till proper examination shall disentangle if possible the network which, without concealing it, envelops the truth. The proofs we have just produced thus acquire a singular moral value, and there is pleasure unutterable in gaining so much after having risked all-save honour.


## APPENDICES.

## APPENDIX I.

## The Great Pyramid's Base Measured by Mr. Flinders Penrie;

Intentional Character of its Irregularities. ${ }^{1}$
The sides of the Pyramid's base, or the distances between the four sockets, A, B, C, D, of that base, are, according to Mr. Flinders Petrie ${ }^{2}$ (in British inches),

| East | $\ldots$ | $\ldots$ | $\ldots$ | AB $=9130.8$ |
| :--- | :--- | :--- | :--- | :--- |
| North | $\ldots$ | $\ldots$ | $\ldots$ | BC $=9129.8$ |
| West | $\ldots$ | $\ldots$ | $\ldots$ | CD $=9119^{\circ} 2$ |
| South | $\ldots$ | $\ldots$ | ... | DA $=9123^{\circ} 9$ |

The four points, A, B, C, D, have different levels; the S.E. corner of the Pyramid is the lowest. The heights of points A, B, C, D above the horizontal plane passing through that S.E. point (the lowest) are :-

| A, | 0.0 |
| ---: | ---: |
| B, | 11.4 |
| C, | 7.1 |
| D, | 16.9 |

The azimuths of the sides, taken from North to West, are : -

| AB, | $5^{\prime} 21^{\prime \prime}$ |
| :--- | ---: |
| BC, | $3^{\prime} 20^{\prime \prime}+90^{\circ}$ |
| CD, | $7^{\prime} 33^{\prime \prime}+180^{\circ}$ |
| DA, | $-\mathrm{I}^{\prime} 15^{\prime \prime}+270^{\circ}$ |

The Pyramid's faces are inclined on the horizon by $51^{\circ} 52^{\prime}$ (Flinders Petrie).
${ }^{1}$ A paper on this subject (see C. Piazzi Smyth's "New Measures of the Great Pyramid by a New Measurer," p. 87) had been previously published by the Rev. H. G. Wood, Sharon, PA.

2 "The Pyramids and Temples of Gizeh," p. 12.

If from each of the sides, $\mathrm{AB}, \mathrm{BC}, \mathrm{CD}, \mathrm{DA}$, we carry a plane having this inclination, the intersections of the four planes with the horizontal plane of the base passing through the lowest corner A, will form a quadrilateral figure, $A B^{\prime} C^{\prime} D^{\prime}$, whose sides are:-

$$
\begin{aligned}
& \mathrm{AB}^{\prime}=9140^{\prime} 3 \\
& \mathrm{~B}^{\prime} \mathrm{C}^{\prime}=9 \mathrm{C}^{\prime} 44^{\prime} 3 \\
& \mathrm{C}^{\prime} \mathrm{D}^{\prime}=9138^{\prime \cdot} \\
& \mathrm{D}^{\prime} \mathrm{A}=9 \mathrm{I}^{\prime} 37^{\prime} \mathrm{I}
\end{aligned}
$$

and the diagonals:-

$$
\begin{aligned}
& \mathrm{AC}^{\prime}=12924^{\circ 22} \\
& \mathrm{~B}^{\prime} \mathrm{D}^{\prime}=12927^{\circ} 47
\end{aligned}
$$

The mean of the four sides is 9140 , or, in pyr. inches, 913 I , i.e., the desired theoretical number. The sum of the two diagonals is 25826 pyr. inches; therefore we do not only join M. Piazzi Smyth,' in saying of Mr. Flinders Petrie's measurements, that they do not oblige us to swerve "from the older accounts," but we maintain that the older accounts find in those measurements the most striking sanction.
It can, moreover, clearly be seen that the irregularities measured by Mr. Flinders Petrie are in no way accidental, but are certainly intentional.
(1) A first evidence is found in the fact that the sum of the diagonals is the same as the sum of the diagonals of the square of the mean side, 9 rizi.
(2) An irregular base is a fit symbol for a troubled orbit like that of the earth, that orbit being, in fact, neither a circle nor an ellipsis; but the ellipsis which in the mean represents the orbit, must be found in that basis. Now, if a rectangular figure is constructed with the mean of sides N and S , and the mean of sides E and W , the ellipsis inscribed in that rectangle will be exactly the same as the terrestrial ellipsis, their eccentricity will be exactly alike.

$$
\begin{aligned}
& \frac{\mathrm{B}^{\prime} \mathrm{C}^{\prime}+\mathrm{D}^{\prime} \mathrm{A}}{2}=9140^{\prime} 7 \\
& \frac{\mathrm{AB}^{\prime}+\mathrm{C}^{\prime} \mathrm{D}^{\prime}}{2}=9139^{\circ} 2
\end{aligned}
$$

[^50]And the eccentricity of the ellipsis inscribed in the rectangle is 0.018 , that is to say the eccentricity of the terrestrial orbit during historical times.
(3) If we go round the Pyramid, in the direction A, B, C, D from the lowest level to the highest, we accomplish a revolution around "the four corners of the earth" (Rev. vii., 1 ), the earth being itself symbolised by the Pyramid (as we know, for instance, by the compared weights of the earth and of the Pyramid). This revolution leads to the conception of a period, peculiar to the earth, which will find its evidence in a characteristic datum of point D (i.e., the maximum level $16 \%$, proper to that point). Now, that period is no other than the fundamental historical period of the nation's life (Brück's Law), equal to the diagonal $515 \cdot 165$ of the King's Chamber.

The sum of the two diagonals, $A C^{\prime}+\mathrm{B}^{\prime} \mathrm{D}^{\prime}$, diminished by four times 16.9 (i.e., subtracting 16.9 from each half-diagonal), gives a sum of reduced diagonals (that sum representing a cycle, similar to that of precession) equal to,

$$
\begin{aligned}
25851^{\circ} 69-67 \cdot 6 & =25784^{\circ} 09 \text { British inches, } \\
& =25758.306 \text { pyramid inches, }
\end{aligned}
$$

and,

$$
\frac{25758 \cdot 306}{50}=515 \cdot 166
$$

All these results give an idea of the wonderful exactness of Mr. Flinders Petrie's measurements, and show how valuable to the cause of the Great Pyramid has been the action of the Royal Society of London.

## APPENDIX II.

A Numerical Relation between facob's Pillow, now in Westminster, and the Great Pyramid;
showing that the Anglo-Saxons possess in London a material " sign" of their Identity. ${ }^{1}$

[^51](Gen. XXVIII., ro-22.) Jacob's stone or pillow (18) is intimately connected with the ladder (12) set $u p$ on the earth, whose top reached to heaven. This stone is a pillar, a God's house, the top of which is anointed ( 18,22 ).

Similarly, the Great Pyramid is an altar or pillar (Is. XIX., 19), whose top, chief corner-stone, is Christ (Eph. II., 20, 2I).

Now, when looking at a face of the Great Pyramid in its present state, it is impossible not to think of a ladder
 formed by the succession of courses, set up on the earth along the base side of the Pyramid, like the ladder of Jacob's vision, set up on the earth near the pillow stone. If there is a numerical relation between this stone and the Pyramid, then it can or must be sought for in the base side.
The base side is a line; the Pillow is a volume of stone. But we read in Ezek. XL., 5, 6 [whose temple (see Appendix V.) is in intimate connection with the Great Pyramid], that around the House there was an enclosing wall, square, having a square section whose side was the unit measure (the reed).

Imagine, then, a square wall along the base of the Pyramid whose side is $9,13 \mathrm{r}$ pyramid inches, with a section of $\mathrm{I} \times \mathrm{I}$ pyramid inches. The volume of one side will be 9,13I cubic pyramid inches. Seek now the volume of Jacob's stone. Glover (in his England, the Remnant, etc., p. 48) gives roughly the dimensions:

| Length | $a=26$ | British inches. |
| :--- | :--- | :--- | :---: |
| Breadth | $b=16 \frac{3}{4}$ | $"$ |
| Thickness | $c=10 \frac{1}{2}$ | $"$ |

At first sight it is evident that these three dimensions are one to another as 2,3 and 5 .

$$
c: b: a=2: 3: 5
$$

and then it will be possible to restore the ideal stone. The length $a$ will be 5 times a certain unity $x$, which we have now to point out;
$b$ will be 3 times, $c$ twice this same unity. It is easy to see that $x$ will be a little greater than 5 . Putting

$$
\begin{aligned}
& \text { British inches. British inches. } \\
& \left.\begin{array}{l}
a=26=5 x \\
b=16.75=3 x \\
c=10.5=
\end{array}\right\} \quad \text { we find } x=\left\{\begin{array}{l}
5.200 \\
5.583 \\
5.250
\end{array}\right.
\end{aligned}
$$

In pyramid inches, $x=5,339$ pyramid inches.
Then, vol. Jacob's pillow in cub. pyramid inches $=2 \times 3 \times 5 \times$ $(5,339)^{8}=4565^{\circ} 6 ; 2$ vol. Jacob's pillow $=913 r^{\circ} 2$, or one of the sides of the square wall constructed on the base of the Pyramid. In another way, imagine a stone the dimensions of which are one to another, as $2: 3: 5$, and the volume of which contains a number of cubic pyramid inches (one inch $=\frac{1}{25}$ of the Hebrew sacred cubit) equal to the number of inches in the Pyramid outline ${ }^{1}$ divided by $2 \times 2 \times 2$, this unique stone will be the "stone of destiny" to-day in Westminster Abbey.
The theoretical value of the unit-length $x$ (see above) is $\sqrt[3]{10 \frac{365 \cdot 24}{24}}=5,339$. The comparison between the theoretical and observed elements in pyramid inches is as follows:-

|  | Theoretical. |  | Observed (from Glover, p. 48. |  |
| :--- | :---: | :---: | :---: | :---: |
| Unit-length $x$ | 5.339 | pyramid inches. | 5.339 | pyramid inches |
| Length | 26.70 | $"$ | $25^{\circ} 97$ | $"$ |
| Breadth | 16.02 | $"$ | $16^{\circ} 73$ | $"$ |
| Thickness | 10.68 | $"$ | 10.49 | $"$ |

Is not, then, the Jacob's pillow of Westminster the true pillow of old ? Is it not true to say that they do not know their "signs"? And, if one of these material signs is in Westminster, why should not all the others be at Tara?

[^52]
## APPENDIX III.

Eden, the Great Pyramid, and the "Stone of Destiny" (Jacob's Pillow, Westminster), the Bounds of History.

A verification of the exactness of the theory is to be sought in the combination of the two periods of $515^{\circ} 165$ and $520^{\prime} 165$ years. From these two data results a determined value $x$ of the velocity (annual displacement) of the centre of civilisation, i.e., of the secular meridian or meridian of precession (see $\S \S \mathrm{I}$ and 20 ), from east to west, and this calculated value $x$ must agree with the observed displacement of this centre. This consideration will afford us some new decisive confirmations.

The angular velocity of the quincentennial meridian is

$$
\frac{360^{\circ}}{515 \cdot 165}
$$

In $5^{20} 165$ years, it runs over $\frac{360^{\circ} \times 520^{\circ} 165}{515^{\circ} 165}$, and consequently, when this time has elapsed, the quincentennial meridian is west of its initial position by a number of degrees equal to

$$
\frac{360^{\circ} \times 520.165}{515^{\prime} 165}-360^{\circ}
$$

Therefore

$$
x=360^{\circ} \frac{\left(\frac{5}{5} \frac{20 \cdot 165}{5} \cdot 165\right)}{5^{2} \cdot 165}
$$

The displacement of the secular meridian in $t$ years, is then equal to

$$
\text { (1) } x t=0^{\circ} .006717 t \text {. }
$$

According to the law of history, this meridian will reach the centre of action (London) of the chief nation (England) during the last quincentennial period, at the date marked by the centre $2129^{\circ} 56$ (§ 2I) of the phase of apogee of this period; moreover, if any geographical point must be designated as fixing the true position
of the meridian at this date, it cannot be other than the Stone of Destiny, the Jacob's Pillow, now in London, in Westminster Abbey, a mute and yet speaking witness, brought forth and placed there long ago, to be reached by the meridian in the latter days.

Starting thence, we can calculate the position of the secular meridian at any epoch of history; let us seek, namely, this position at the dates of the creation of man and of the Deluge, i.e., at the beginnings of the two fundamental parts of human history. (As we have seen, the chronological system of the Pyramid comprehends explicitly the second of these two parts, or postdiluvian history.)
I. The date of the birth of Adam is 4184 B.c.; by means of formula ( 1 ), where $t=2129^{\circ} 5^{6}+4184=6313^{\circ} 56$, we get for the longitude of the secular meridian at this epoch, longitude relative to the meridian of London (i.e., of Jacob's Pillow, or Westminster),

$$
0^{\circ} \cdot 006717 \times 6313^{\circ} 56=42^{\circ} 24^{\prime} \text { east ; }
$$

and, relatively to the meridian of Greenwich,

$$
42^{\circ} 16^{\prime} \text { east, }
$$

if we observe that the longitude of Westminster is $7^{\prime .} 54$ west.
If the theory is correct, $42^{\circ} 16^{\prime}$ east must be the longitude of Eden, relatively to Greenwich. That it is so indeed, in accordance with Genesis II., 10, 14, a glance at the map will show. It leads us exactly to the region of the sources of the Euphrates and Tigris.
2. Let us seek now the position of the secular meridian at the epoch of the Deluge, i.e., at the beginning of postdiluvian history, of that part of history which the Pyramid was destined to recount explicitly on its chronological scale. The longitude of the Pyramid is $3 I^{\circ} 9^{\prime}$ east of Greenwich.

Putting

$$
t=2129^{\circ} 56+2528=4657.56
$$

in formula ( I ) (Deluge $=2528$ в.c.), we find :
Longitude of the secular meridian east of Westminster $=$ $0^{\circ} \cdot 006717 \times 4657^{\circ} 56=31^{\circ}{ }^{1} 7^{\prime} 09 ;$
or, subtracting $0^{\circ} 7^{\prime} 54$, i.e. the longitude of Westminster west of Greenwich,

Longitude of the secular meridian east of Greenwich $=$

$$
31^{\circ} 17^{\prime} 09-0^{\circ} 7^{\prime \prime} 54=31^{\circ} 9^{\prime} 55
$$

i.e. $=$ longitude of the Great Pyramid.

Then, at the epoch of the Deluge the secular meridian marked providentially the place where the monument of Divine Inspiration was to be built, which was destined to summarise all postdiluvian history.

These results justify entirely, we think, the title of this Appendix.

Many subsidiary and confirmatory remarks may be made concerning the process of the secular meridian. If we calculate the position of the secular meridian at the epochs of the apogees of the successive chief nations of the historic law, we see the meridian in advance, as a leader, on the centre of civilisation until the time of the Romans. Then coincidence is established; and this external fact, which gives expression to a natural subdivision in human history, corresponds, indeed, in history and in prophecy to the establishment of the extensive power of the Roman World, a power such as never before had been observed; to the birth of Christ; to the beginning of the Grand Gallery in the Pyramid; to the end of the period of the seals in the Apocalypse, which, in accordance with Ezekiel, as we have seen, separates the "leaders" or chief nations anterior to the Romans, from the ulterior part of history, indicating clearly at this very time a growing power and characteristically increasing possession of the world by the " Prince of this World."
We might also observe that the secular meridian reached the east coast of England precisely during the last phase of constitution ( 1870 ) of the Israel of the last days.

If other features in the Great Pyramid would permit us to calculate the exact latitude of Eden, we should be able to fix exactly on the surface of the earth the very geographical point of the creation of man. A hint to enquirers.

## APPENDIX IV.

The Laws of Population and the Great Pyramid.
However variable the population of the world may be in its accidental increase or decrease, it must possess a secular part always growing in geometrical progression.
$P$ being the population at the epoch $t$ years, $P_{0}$ the population at the epoch $t_{0}$ years, $I+p$ the ratio of the progression, we have the formula

$$
\text { (i) } P=P_{0}(i+p)^{t-t_{0}}
$$

$a$ being the fraction which expresses the proportion between the annual number of births and the population, $\beta$ the similar fraction for the annual number of deaths, we have

$$
\mathrm{p}=a-\beta
$$

The number $H$ of human beings born on the earth from the epoch $t_{0}$ to the epoch $t$, is given by the formula

$$
\text { (2) } \mathrm{H}=a \frac{\mathrm{P}-\mathrm{P}_{\mathrm{o}}}{1 \cdot(\mathrm{I}+\mathrm{p})}
$$

where $1 .(x+p)$ denotes the neperian logarithm of $x+p$.
(r.) The number p, i.e., the annual increase of the population, is commonly taken as very nearly ${ }_{200}^{200}=0.005$. A first confirmation of Biblical history may be found in the fact that the value of $p$, deduced from the supposition that eight persons (Gen. VIII., 18; 1 Peter III., 20) were living at the epoch of the Deluge, is just of the same order as the observed preceding value o.005.

In 1887 A.D. ("Annuaire du Bureau des Longitudes," 1889, p. 402) the population of the world was $1,483,000,000$.

Putting in formula r ,

$$
\begin{aligned}
& P=1,483,000,000 \\
& P_{0}=8 \\
& t-t_{0}=1887+2528=4415
\end{aligned}
$$

we have

$$
1,483,000,000=8(1+p)^{4415}
$$

and

$$
\log \cdot(\mathrm{r}+\mathrm{p})=0.0018727
$$

where log. denotes a vulgar logarithm. Whence $p=0.004$; which number is exactly of the same order as the approximate admitted value 0.005 .
(2.) Let us now calculate with the value of $r+p$ which we have just obtained, the population at the Birth of Christ. [The result may be very different from the real population at this time, because we seek here only the value of the secular part (or that part which increases in geometrical progression) of the population.]

Putting in formula 1 ,

$$
\begin{gathered}
t-t_{o}=2528 \\
P_{o}=8 \\
\log \cdot(\mathrm{I}+\mathrm{p})=0.0018727
\end{gathered}
$$

we get

$$
\mathrm{P}=433,790
$$

The number obtained by this calculation stated only on an actual datum of statistics, is not far from 400,000 , or $4 \times 10^{5}$, and if we consider that the number 4 is, in the Apocalypse by the "four leaders," and, as we have seen, in Ezekiel and Zechariah too, characteristic of the times of History which elapsed before Christ (forming here, perhaps, i.e., in the secular development of the population, the first section of a sort of "week" of which the three last units concern the times after Christ), we are induced to think that 400,000 is the true value of the secular part of the population of the earth at this memorable date in history, the Birth of Christ.

If so, then a better value of $p$ will be given by the equation

$$
400,000=8(1+p)^{2528}
$$

whence we get

$$
\log .(r+p)=0.0018588
$$

(3.) The preceding hypothesis becomes a quasi certainty when we enquire what shall be the number of human beings living at the establishment of the Reign of Christ, i.e., at the date marked by the axis of the King's Chamber or 2283 A.D.

Putting in formula I ,

$$
\begin{aligned}
& P_{o}=8 \\
& t-t_{0}=2283+2528=481 I \\
& \log \cdot(I+p)=0.0018588
\end{aligned}
$$

we get
i.e., very nearly

$$
\mathrm{P}=7,011,000,000
$$

$$
\mathrm{P}=7 \times 10^{9} .
$$

The "seven" completes here the "wcek" we had supposed, and which is thus divided by the Deluge and the Birth and Reign of Christ into two parts corresponding to the numbers "four" and "three." Moreover, as a confirmation of this remarkable number $7,000,000,000$ at the establishment of the Reign, we must bear in mind those "seven thousands" which the Lord has reserved for Himself (I Kings XIX., 18 ; Rom. XI., 4).
(4.) It becomes evident that the true values of $P$ at the fundamental dates of the Birth of Christ and of the Reign of Christ are,

$$
\mathrm{P}=4 \times 10^{5} \text { and } \mathrm{P}=7 \times 10^{9}
$$

and this result enables us to determine a yet more exact value of $\mathrm{I}+\mathrm{p}$.

Putting in formula 1 ,

$$
\begin{aligned}
& P_{0}=4 \times 10^{5} \\
& P=7 \times 10^{9} \\
& t-t_{0}=2283
\end{aligned}
$$

we obtain

$$
\log \cdot(\mathrm{r}+\mathrm{p})=0.001858536 \mathrm{r}
$$

and

$$
\mathrm{x}+\mathrm{p}=\mathrm{r} \cdot 004288452656
$$

If some error should still remain, it can only proceed from an error in the position of the axis of the King's Chamber.
(5.) The preceding results relative either to the possibility of deriving the population of the earth, as it is to-day observed, from the eight saved at the Deluge, or to the characteristic values of $P$ at the epochs of the Birth and Reign of Christ, should, we think, suffice to constitute a new and striking argument. But let us now proceed further and, making use of formula 2 , enquire
what the number of men on the earth must have been during the postdiluvian history of humanity, that part of history to which the Pyramid refers.

Let us make in formula 2,

$$
\begin{gathered}
\mathrm{P}_{\mathrm{o}}=8 \\
\mathrm{P}=7,000,000,000 \\
\log \cdot(\mathrm{I}+\mathrm{p})=0.001858536 \mathrm{r} \\
\mathrm{H}=10 a \times 163,572,000,000
\end{gathered}
$$

Now, this number is very nearly ioa $\times$ Vol. Pyr. in cub. pyr. inches. We have, in fact, for this volume

$$
\mathrm{V}=\left(913 \mathrm{I}^{\circ} 05\right)^{2} \times \frac{58 \mathrm{r} 3^{\circ} 01}{3}=161,555,317,506 \mathrm{cub} . \text { pyr. inch. }
$$

There is then, as has been already conjectured, ${ }^{1}$ at least an approximate relation between the number of human souls on the earth and the volume of the Pyramid.
(6.) A more precise and defined relation depends on the knowledge of the co-efficient $a$, i.e., the number which expresses the annual proportion of births.

If, as has already been supposed, the number of men is equal to the volume of the Pyramid in cubic pyramid inches, then $a$ will be nearly ${ }^{1} \sigma$, an average value of the same order as the observed values. ${ }^{2}$

If we then suppose $H=V$, as we have, from what precedes,

$$
\log \cdot \frac{H}{a}=12 \cdot 2137113 \text { and } \log \cdot V=11 \cdot 2083212,
$$

we get

$$
\log \cdot \frac{1}{a}=1 \cdot 0053901 \text { or } a=\frac{1}{10 \cdot 1250}
$$

and this value

$$
a=\frac{1}{10.1250}=\frac{10^{4}}{101250}
$$

[^53]is very remarkable, for we have
$a=\frac{10^{4}}{\text { 10I250 }}=\frac{2 \times 2 \times 2}{3 \times 3 \times 3 \times 3}=0.09876543209876543209 \ldots$ etc., always so ad infinitum; or approximately.
$$
a=0.098765432 \mathrm{r}
$$
a symbolical number singularly expressive of an indefinite generation issuing from the marriage ( $2^{3}$, a divine institution), of four couples (3).

If we admit this value of $a$, we are led to another expression no less remarkable for $\beta$, the coëfficient of the annual proportion of deaths. (the death - coefficient). The relation $\beta=a-\mathrm{p}$ gives

$$
\begin{gathered}
\beta=0.098765432 \mathrm{I}-0.0042884527=0.0944769794 \\
\log \cdot \frac{\mathrm{r}}{\beta}=\mathrm{I} .0246740
\end{gathered}
$$

and leads us to the number

$$
\beta=\frac{\mathrm{I}}{10.5845} \text { or } \beta=\frac{\mathrm{I}}{10.5846}=\frac{10^{4}}{105^{8} 4^{6}}
$$

i.e.,
$\boldsymbol{\beta}=\frac{10^{4}}{105^{846}}=\frac{10^{4}}{(6.6 .6) 7 \cdot 7 \cdot 10+\frac{6}{7}+\frac{6.6}{7 \cdot 7}+\frac{6.6 .6}{7 \cdot 7 \cdot 7}+\ldots \text { ad infinitum }}$
a number which makes manifest the Number of the Beast, the number of confusion and sin, which is formed only by the combination (and the confusion) of 6 and 7 . By the indefinite succession of the terms $\frac{6}{7}, \frac{6.6}{7 \cdot 7}, \ldots$ in the denominator, it marks the indefinite destruction introduced by $\sin$ or by the human attempting the Divine; it expresses, too, that death is the fruit of sin, for if, in this expression, all the sixes were sevens, the value $\beta$ would become zero-there would be no death. This is an example of the manner in which the highest spiritual truths are expressible by numbers, and are so expressed, in fact, in the stone book of Divine Inspiration.
(7.) It must be carefully remarked that the theoretical values of $a$ and $\beta$, which now give for the true value of $p$,

$$
\mathrm{p}=0.00428855059 \mathrm{I} \ldots
$$

have not been chosen a priori; what makes them important and interesting is that, starting from observed data, we have been led to them by a plain analytical way.

They give:
Epoch at which the population will be equal to $7,000,000,000=$ 2183 ; and Axis of King's Chamber in the Pyramid, Reign of Christ $=2183$.

Epoch at which the population equalled $400,000=$ Christian era $=0$; and Beginning of Grand Gallery, Birth of Christ $=0$.

Epoch of population equal to $8=2528$ before Christian era; and Deluge according to the Bible $=2528$ в.c.

Number of men in postdiluvian history, from the Deluge to the Reign $=161,555,615,003$; and volume of the Pyramid in cubic pyr. inches $=161,555,317,506$.

The difference between these two last numbers is of no importance whatever. It amounts to 297,497 ; i.e., 0.000002 of the volume of the Pyramid, and corresponds to an imperceptible error on the base side of less than $\frac{10}{100}$ of an inch.

We derive from the consideration of these laws of population on the contrary a new verification of the length of the base side.
$x$ being this side, $V$ the volume of the Pyramid, as the height is the radius of a circle whose circumference equals the perimeter of the base, we have $x=\sqrt[3]{\frac{3}{2} \pi V}$, and making $\mathrm{V}=16 \mathrm{I}, 555,615,003$ (the total number of postdiluvian men) we get $x=9131^{\circ} 05^{\circ}$; the generally adopted value was $x=913 r^{\circ} 050$. In each case the corresponding value of the tropic year remains $365^{\circ} 242$.

## Some Subsidiary Remarks.

As an example of the manner in which all parts of truth are connected, in order that they may be made known progressively and as so many new proofs, we must close our subject by showing
how the preceding results enable us to comprehend a passage in the Apocalypse which has hitherto remained unexplained.

We have been led ( $\S 67$ ) to the conclusion that the "Elders" of Rev. IV., 4, io, II, represent antediluvian humanity; but why are they "twenty-four" ?

If our laws of population were to present this number 24 as ruling the development of the antediluvian population (always in what concerns the secular term), that fact would be at the same time a confirmation of our interpretation of the word "Elders," and an explanation of this peculiar number in the passage alluded to.

Now, the time which elapses from the creation of man to the Deluge is 1,656 years, and as regards the formation of humanity during this period, the text of Genesis itself leads us to the consideration of three eras:
(r.) The creation of Adam, in order to consider the whole period.
(2.) The Birth of Cain (and Abel) (Cainites).
(3.) The Birth of Seth (Sethites).

The birth of Seth took place A.m. 130, i.e., $1656-130=1526$ before the Deluge.

For the birth of Cain, we must here recall the parallelism between the terrestrial and the celestial Adam (see § roo), from which we deduced that the temptation of Adam took place near 30 Anno Mundi. The mystical union of Christ and the Church, of the Bridegroom and the Bride (see § iI2, Letter to Pergamos) corresponds in this parallelism to the first union by marriage, and therefore the births of Cain and Abel, who speak to us of necessity of spiritual birth, election and grace, must be placed near 33 A.m., i.e., $1656-33$ $=1623$ before the Deluge.
So, we are led, in studying our case, to start successively from the three eras 1656,1623 and 1526 before the Flood.
(r.) If we calculate, by means ot our preceding number $p$, the population $P$ which would spring from 2 persons, in 1,656 years, we find very nearly 24 hundred persons (more exactly $23^{\circ} 9$ ). The difference corresponds only to an error of a fraction of a year on the x,656 years admitted.

Suppose, indeed, the population derived from two people to be 24 hundred persons at the epoch of the Deluge ; how many years would be required for this increase?

Putting in formula ( I ) $\mathrm{P}=24 \times 100$.

$$
\begin{aligned}
& P_{\circ}=2 \\
& \log \cdot(I+p)=0.001 \delta_{5} \delta_{5115} \\
& t-t_{0}=1656.8
\end{aligned}
$$

i.e., the time of the creation of Adam and Eve before the Deluge.
(2.) Calculating the total number of persons springing from two from the era of the Cainites till the Deluge, we find very nearly $48=2 \times 24$ thousand (more exactly $477^{\circ} 9$ ); the difference proceeds only from a difference of a fraction of a year on the admitted era 1623 before the Flood.

By formula (2) where $H=2 \times 24 \times 1000, P_{0}=2$, we find, using formula ( 1 ) as an intermediate,

$$
t-t_{0}=1623^{\circ} 6
$$

i.e., the time of the Birth of Cain.

The Cainite population $P$ at the epoch of the Deluge is then found to be 2,082 , i.e., 4 times the number of years in the period $520 \cdot 165$ of the life of nations; for $4 \times 520 \cdot 165=208 \mathrm{r}$.
(3.) Calculating the number of persons springing from two from the era of the Sethites to the Deluge, we find very nearly $5 \times 12 \times 528$, i.e., 60 times the number of years in the spiritual period of 528 years which is the "time" of the great spiritual 70 th week of Daniel and of the Apocalypse (Letters to the Seven Churches). The spiritual period 528 concerning the Sethites is here opposed to the earthly period of 520.165 applied to the Cainites.

By formula 2, where $H=5 \times 12 \times 528, P_{0}=2$, we get for the Sethite population at the epoch of the Deluge the remarkable number

$$
P=5 \times 5 \times 55
$$

and for the birth of Seth

$$
t-t_{0}=1526.6
$$

before the Deluge; the value actually given in the Bible being 1526.

The number 24 is here conspicuous in the value $H$, which is the number of Sethites from Seth to the Deluge, for we have

$$
\mathrm{H}=5 \times 44 \times 24 \times 24
$$

Our remarks may be summarised as follows:-
2 persons, at the Era of Adam, give at the Flood $P=100 \times 24$.
2 persons, at the Era of the Cainites, give from thence to the Flood a total of existences $\mathrm{H}=2 \times 1000 \times 24$.

2 persons, at the Era of the Sethites, give from thence to the Flood a total of existences $\mathrm{H}=5 \times 44 \times 24 \times 24$.
(The Eras 1656 , 1623 and 1526 must be read 1656.8 , $1623^{\circ} 6$ and 1526.6.)
(Between the births of Adam and Noah, the fathers of antediluvian and postdiluvian humanity, there are 1056 years, i.e., 2 periods of 528 years $=44 \times 24$ years).

The number 24, as we have conjectured from Chap. IV. of the Apocalypse, is then in fact a ruling number in the computations relative to antediluvian history, the history to which belong these "twenty-four Elders" who cast down their crowns before the throne of the Almighty, and praise Him for His creation of all things (Rev. IV., ro, II).

Let us repeat that we find a confirmation of the spiritual character of this period 528 of Daniel and the Apocalypse, in the fact that this period appears only (as far as we can say from what precedes) in the numbers relative to the Sethites, the earthly period of $520 \cdot 165$ being on the contrary applied to the Cainites. Lastly, we cannot but observe that (always in the preceding numbers) we find the square of 24 , and consequently the square of 12 or $1+4$, only in a number relating to the Sethites. This is a very interesting feature which should be compared with the presence of this same number, 144, as a peculiar spiritual one, in the Apocalypse (Rev. VII., XIV. and XXI.).

## APPENDIX V.

## On the Book of Ezeriel.

We have been led to think ( $\$ 75$ ) that the times of the Antechamber are those of the construction of Ezekiel's Temple by the "two witnesses" (Rev. XI., 3), Israel and Judah, and that the first granite stone in the floor, a stone whose centre on the chronological scale is 2000 A.D., is the symbol of this Third Temple.
A hundred years only separates us from this epoch, and, such being the case, the peculiar study of the Book of Ezekiel becomes a duty for the Christian reader.

In what follows, some reflections on this great subject are presented.
(r.) The Book of Ezekiel is composed of a series of visions or prophecies, arranged in chronological order. The era to which the dates of these prophecies are referred by Ezekiel is the year in which the prophet himself was carried into captivity with King Jehoiachin, II years before the captivity, properly so-called, that of Zedekiah (Ezekiel XL., i). The era in question is, therefore, in the literal chronology of the Bible, $606+11=617$ в.c.
The series of years 5 th (I., 2) ; 6th (VIII., 1 ) ; $7^{\text {th }}$ (XX., I ) ; 9th (XXIV., r) ; roth (XXIX., 1 ) ; irth (XXVI., r ; XXXI., 1 ) ; 12th (XXXII., 1,17 ; XXXIII., 21) ; 25th (XL., 1); 27th (XXIX., 17); mentioned by Ezekiel lead to the series of dates, 6i2, 6ir, 6io, 608, $607,606,605,592,590$ в.c.
At the very beginning of the prophecy, the 3oth year is mentioned (I., I), say 587 в.c., as that in which the prophet saw summed up, in one general vision, the whole of the preceding visions; finally, after he has gone to his companions in captivity, to inform them of the revelation he has received, seven years (the seven days of chap. III., II, 15) are still indicated as passing before he speaks to them. These seven years added to 30 make 37 and bring us to the year 580 b.c.

Observation.-If the numbers 30 and 7 are thus made conspicuous from the beginning of the book, there must be a reason for it ; and we shall see that they serve as a key throughout the whole interpretation. We have already remarked the same fact with regard to the 49 years set apart by Daniel (see § roo, interpretation of the 7 oth week of Daniel).
(2.) The general subject of the book is the history of Israel and Judah; to them, not to other nations, is the prophet sent (III., $4,5,6$ ).

Moreover, this history is presented (it has already been so in the Pyramid) as being the axis of all history. After a first general view of the terrestrial organism, and of the life of nations, starting from the Deluge, which is given in Chap. I., and which we have already interpreted (§ 66), a rolled book (II., 8-10; III., 1-3)-which is none other than the Little Book of the Apocalypse (Rev. X., 8-ro; XI.), in so far as it contains the history of the two Witnesses (Israel and Judah)-is offered for the meditation of the prophet.
The infidelity of the chosen people brings its punishment, its momentary rejection and dispersion among the nations. This state of abasement and of annihilation in the eyes of the world is represented by the captivity of the prophet himself (III., 25 ; IV., 8) ; by a sleep (III., 4, 5, 6) ; by death (XXXVII., 1, 2). But this sleep will come to an end, this death will be followed by a resurrection (XXXVII., 3-13) ; as two sticks, in a man's hand, firmly joined together make one, and thus add to their strength, Israel and Judah shall be reunited, gathered again in the land of their fathers (XXXVII., $16-25$ ), and the seal set to this final union will be a sanctuary raised in the midst of their country, a temple to the Eternal, which will serve as a testimony to the world (XXXVII. 26-28). The country will be subdivided in a definite manner indicated by the prophecy, and a city will be built near the Sanctuary, also after a definite plan (XL.-XLVIII.).
(3.) The book subdivides itself into three parts:
I. A general resumé of the subject, binding the history of JudahIsrael to that of all humanity, beginning and ending with the great
vision of the terrrestrial organism and of the life of nations (I.-XI.). ${ }^{1}$
II. The analysis of the subject from a more concrete point of view, comprising a series of prophecies relative to the chosen people, and to the nations with whom it had relations; this analysis brings us to the establishment of the Temple and to the eternal cove ${ }^{2}$ ant (XII.-XXXIX.).
III. The sub-division of the country and the geometrical plan of the Temple (the Sanctuary and the City) (XL.-XLVIII.).
(4.) As the third part of which we have just spoken indicates the units of measure which the prophet employs, and as it is probable that this metric system is used in the numbers which the other two parts contain, it is the study of this third part which must first occupy us. The important fact that we are about to establish is, that a close connection exists between the "City" of Ezekiel and the Great Pyramid; this "City" symbolises the physical world, as opposed to the Heaven which the Sanctuary doubtless represents; rhus, taken together, the City and the Sanctuary described by Ezekiel present a sub-division in accordance with the double character, at once celestial and terrestrial, of the Kingdom of Christ, as is already indicated in the Pyramid by the King's Chamber, and the Chambers of Construction which surmount it-and, probably, in the antechamber by the granite floor and the Granite Leaf suspended above it.
(5.) Remarks and observations.

We find described in Chapters XL., 5, and XLII., 15-20, the square enclosure of a square section which surrounds "the house."
Chapter XLV., 2, assigns to the Sanctuary a square of 500 reeds by 500 , with 50 cubits "round about for the suburbs thereof."

[^54]Chapters XL.-XLIV. contain the description of the Temple with all its measurements.

Chapters XLV.-XLVIII. describe the division of the country among the Tribes and the relative disposition of the Temple and the City. I shall not give here the drawing which represents this disposition; on this subject the reader may consult the remarkable pamphlet, "Shiloh, the Site of Ezekiel's Temple," by Oxonian. ${ }^{1}$

As to the division of the country among the Tribes (XLVIII.), we may remark that the 12 Tribes are divided into two groups of 7 and 5; 7 are to the north of the Temple and the City, and 5 to the south.

The great square, the sides of which measure each 25,000 reeds, which constitutes the reserved part of the country, enclosing the Temple and the City, is divided into three parts: ist, the holy portion containing the Sanctuary; 2nd, the City; 3rd, the portion of the Levites. What is said of the children of Zadok, those who offer sacrifice truly (XLIV., $I_{5}, 16$ ), should be compared with what is said to Philadelphia (Rev. III., 12) ; and what is said of the Levites. who have gone astray (XLIV., 9, I4) should be compared with what is said to Thyatira ( Rev . II., 26, 28).
(6.) Let us enumerate the units of measare employed by Ezekiel.

The cubit equals one common cubit, plus a hand-breadth (XL., 5); it is therefore the pyramidal cubit of 25 pyramid inches.

The reed equals 6 cubits (XL., 5).
Considering the reed by analogy as a new kind of cubit, formed of 25 inches, which we shall call reed-inches, we shall have:

25 reed-inches $=6$ pyr. cubits $=6 \times 25$ pyr. inches, and 1 reedinch $=6$ pyr. inches.
(7.) Let us now point out how the City is the symbol of the physical world, especially of the solar system, still more especially of our Sun, Earth and Moon system, and how systematically it is bound up with the Great Pyramid.

The "City" is only indicated in Ezekiel by two concentric squares (XLVIII., 15, 16, 17), the one, EEEE (see Figure VI.), with

[^55]a side of 4500 reeds, which limits the City properly so-called, the other, exterior and not represented in the figare, with a side of 5000 reeds; the space between the two squares is occupied by the suburbs of the City.
This leads, by analogy with the Pyramid, to the idea of a symbolic representation of orbits and of astronomical revolutions by squares. Now we remark, at first sight, that the perimeter of the City (square EEEE) is equal in cubits to the duration of the revolution of the great axis of the terrestrial orbit.
(From observation we know that this revolution, which takes ro8,000 years, combined with the precession of the equinoxes, determines the duration, of about 21,000 years of the return of the perigee to the equinox, that is to say, a fundamental period from the point of view of the physics of the globe.)
We have, in fact, $4 \times 4500 \times 6=18000 \times 6=108000$.
(The passage XLVIII., 34, expressly points out that the perimeter is 18000 reeds.)

The outline EEEE of the town, which thus represents one of the longest fundamental revolutions of the terrestrial orbit, may be considered then as symbolising this orbit, the sun, the centre of the world, being in the centre S of the square.
(8.) The suburbs of which the text speaks, make us think also of the orbit of the moon, which is like a suburb of the earth. Does the text give us any indication with regard to this? It does; the physical world is the symbol of the spiritual world; now we see (XLV., 2) that the Sanctuary (the spiritual world) is constructed upon a square of 500 reeds, with a suburb of 50 cubits all round, that is, upon a square of which the side is expressed in reeds, and of which we take the $\frac{1}{10}$ th part, afterwards considering this $\frac{1}{10}$ th part as expressed in cubits. Let us apply this operation to the square EEEE of the City, the side of which equals 4500 reeds. It leads us to the consideration of a square MMMM, with a side equal to

$$
4500 \text { reeds }+450 \text { cubits }=4575 \text { reeds. }
$$

Now this square corresponds to the orbit of the moon, for if we
join the centre of one of the sides of this square MMMM to the nearest corners of the square EEEE of the city, the angle $\omega$ of inclination, upon the corresponding sides of the square, of the lines thus traced is equal to $57^{\prime}$, which is exactly the parallax of the moon.

Tbis angle of inclination $\omega$ is given by

$$
\operatorname{tg} \omega=\frac{\frac{4575}{2}-\frac{4500}{2}}{\frac{4500}{2}}=\frac{75}{4500}=\frac{1}{60}
$$

whence $\omega=57^{\prime}$.
The distance of the moon from the earth is equal to 60 terrestrial radii, and the distance between the square MMMM of 4575 reeds of side, which relates to the moon, and the square EEEE of 4500 reeds of side, which relates to the earth, is equal to ${ }^{\frac{1}{6} 0}$ of the distance from the centre $S$ of the squares to the sides of this square EEEE.
The square MMMM with a side equal to 4575 reeds therefore relates to the dimensions of the lunar orbit, that is to say to the distance of the moon from the earth. We shall obtain a square $M^{\prime} M^{\prime} M^{\prime} M^{\prime}$ indicating at the same time the revolution of the moon (synodic revolution or lunation) by passing round the preceding square MMMM, prolonging each of its sides by a length ML equal to $\frac{1}{4}$ of the lunation, and by making the sides of a square pass through the extreme points $L$ thus obtained.

The lunation $=29.530589$ days. (We shall see from what follows that in adopting the period of precession already given by the Pyramid, we may be able to calculate the lunation by an inverse calculation from the precession; but here the lunation is taken as a fact of observation, and the precession is about to be calculated). At the rate of I cubit for I day, the new square $\mathrm{M}^{\prime} \mathrm{M}^{\prime} \mathrm{M}^{\prime} \mathrm{M}^{\prime}$ will then have as side measurement

$$
\begin{aligned}
M^{\prime} M^{\prime} & =4500 \text { reeds }+\left(450+14^{\circ} 765\right) \text { cubits } \\
& =4500 \text { reeds }+464^{\prime} 765 \text { cubits. }
\end{aligned}
$$

(9.) Let us now seek the square which relates to the precession, and that relating to the nutation.

The precession is a period of about 26000 years due to the attraction of the sun and moon upon the terrestrial spheroid; nutation is a period of 18.6 years due to the attraction of the moon.
The effect of nutation is superposed upon the effect of precession in such a manner, that the earth's axis of rotation describes in $18 \cdot 6$ years a little cone round a mean position, while this mean position itself describes in about 26000 years a cone (whose half-angle at the summit is about $23^{\circ}$ ) round one perpendicular to the ecliptic.

The square EEEE ( $\mathrm{EE}=4500$ reeds) represents the terrestrial orbit; the square $M^{\prime} M^{\prime} M^{\prime} M^{\prime}\left(M^{\prime} M^{\prime}=4500\right.$ reeds $\times 464^{\circ} 765$ cubits) the lunar orbit; the sun $S$ is in the centre of the squares.

The precession depends upon both the moon and the sun; therefore the square PPPP, which corresponds to it, will be obtained by adding to the side of the last obtained square $\mathrm{M}^{\prime} \mathrm{M}^{\prime} \mathrm{M}^{\prime} \mathrm{M}^{\prime}$ (which is the lunar square), a length which will represent the action of the sun, plus a length which will represent the action of the moon.

The square NNNN, which will also comprehend the nutation, will be obtained by adding once again (then by adding to the side of the square of precession) the length which represents this action of the moon.
It remains, then, to find the lengths which represent these actions.

Every astronomer knows that they depend upon a characteristic factor, which is the quotient of the mass of the attracting globe divided by the cube of its distance from the earth. Moreover, the action of the moon is equal to $2 \cdot 18$ times that of the sun. ${ }^{1}$

[^56]In measuring the dimensions of orbits we take, in modern astronomy, as unit of length, the distance of the earth from the sun. Let us take here as unit of mass, that of the earth. According to these conditions, since the mass of the sun equals 324000 , that of the earth being 1 , the factor characteristic of its action will be 324000 , and that of the moon $324000 \times 2.18=706320$.

The sum of these two factors, a sum which intervenes in the precession, is then equal to

$$
324000+706320=1030320 ;
$$

now, this last number is nothing else than 10000 times the half ${ }^{\prime}$ length 103.033 of the King's Chamber in the Pyramid (the characteristic factor of the remarkable calculations of M. Simpson), or $2 \times 1000$ times the diagonal $515 \cdot 165$ of the King's Chamber.

The preceding numbers, 324000 and 706320 , divided by $10^{6}$, give the fractions 0.324 and 0.706 .

Considering them as fractions of the cubit and as representing, according to what precedes, the actions of the sun and of the moon, we shall have for the side of the square of precession PPPP, $\mathrm{PP}=4500$ reeds $+(450+14.765+\mathrm{r} 030)$ cubits $=4500$ reeds $+465^{\circ} 795$ cubits $=4577.6325$ reeds; and for that of the square NNNN which comprehends also the nutation,
$N N=4500$ reeds $+(450+14.765+1.030+0.706)$ cubits $=4500$ reeds $+466^{\circ} 50$ r cubits $=4577.7502$ reeds.

Let us construct these squares, and afterwards the small squares $\mathrm{N}^{\prime} \mathrm{N}^{\prime} \mathrm{N}^{\prime} \mathrm{N}^{\prime}$, the sides of which are perpendicular and parallel to the diagonals of the system of all the great squares, and which extend from the terrestrial square whence we set out, to the extreme square we have just reached. The whole plan of the great square of precession PPPP and of the small squares of nutation $\mathrm{N}^{\prime} \mathrm{N}^{\prime} \mathrm{N}^{\prime} \mathrm{N}^{\prime}$ will then fitly represent, as we said above, the system of the two periods, the small period of nutation being superposed upon the long period of precession. But the exact values of these periods are thus also represented.

We have, in fact, the following theorems :
1o times the radius of the circle of surface equal to the square of pra cession, is equal, in reeds, to the precession.

The $\frac{1}{10}$ of the radius of the circle of surface equal to a square of nutation, is equal, in cubits, to the nutation.

The $\frac{1}{10}$ of this last radius is equal to $\frac{466 \cdot 301}{10 \sqrt{2 \pi}}=18.6$ cubits, and the observed period of the nutation is 18.6 years.

Io times the radius of the first circle is equal to $\frac{15776 \cdot 825}{\sqrt{\pi}}$ $=25826.53$ reeds,
and the period of the precession of the equinoxes given by the sum of the two diagonals of the base of the Pyramid, is equal, for the side $9131^{\circ} 05$, to $25826.5^{1}$ years.
If, now, of the two halves of the length 25826.53 reeds, deducted from the numbers of Ezekiel, we make the two diagonals of a square, the perimeter of this square will be equal, in reeds, to the tropical year, and its side $913 r^{\circ} 06$ will reproduce, in reeds, the side of the base of the Pyramid. If, then, we place the centre of the square of the Pyramid upon that of the City of Ezekiel, all the measurements of the one will be found systematically connected with those of the other. It seems more than probable that a new field of research and discovery is in this way open to explorers. For the moment, our aim was to demonstrate the existence of an intimate tie between the Great Pyramid and the Temple of Ezekisi, and this we have attained.
(io.) We must now seek the interpretation of the fundamental numbers contained in the preceding part of the book. We shall find there a new and absolutely decisive verification of the perfect exactitude of the literal chronology of the Bible, of its agreement with the Pyramid, and of the inspired character of the latter.

The numbers we have to explain are the 390 years and the 40 years of the dispersion among the nations, also the state of "historic sleep" of Israel and Judah; this "historic sleep" is symbolised by a sleep of the prophet. He is desired to sleep first upon his left side 390 years for Israel, then, these 390 years having elapsed, 40 years upon his right side for Judah. Bands are put
upon the prophet, and his own captivity which dates from 617 B.c. is the symbol of that of his nation; his prophetic mission extends from 617 to 580 b.c. according to the numbers given by himself, which comprehend a space of 37 years, as our preceding interpretation has pointed out.

The 390 years added to 40 make 430 , which at once recalls the captivity in Egypt ; and it is worthy of notice that the sub-division into 390 and 40 is marked out in this captivity in Egypt, since it was 390 years after the arrival of the Israelites in Egypt that Moses fled from Egypt into the Desert, and 40 years later that he led the people out of Egypt. This is a new proof of the exactitude of the 430 years of the Israelites' sojourn in Egypt, as given in the Bible, and Ezekiel here confirms Genesis.

Now, in the Pyramid, a year is represented upon the chronological scale by an inch; thus, by analogy, in the metric system of Ezekiel I prophetic year will be represented by 1 of Ezekiel's inches, or I reed inch, that is to say 6 Pyramid inches. Therefore to count the prophetic years of Ezekiel upon the chronological scale of the Pyramid, we must multiply by 6 . Now we have $430 \times 6=2580=5 \dot{\times}{ }_{516}$ years (or 5 historic periods) which, starting from the two limiting dates -617 and -580 of the mission of Ezekiel, lead us to

$$
-617+2580=1963 \text { and }-580+2580=2000 ;
$$

that is to say, to the entrance 1963.2 of the antechamber or phase of organisation of the last historic period, that of British Israel, and to the centre 1999.825 of the granite stone characteristic of the floor of this chamber, a stone which the study of the Apocalypse had already led us ( $\$ \S 74,75$ ) to regard as the symbol of the Temple of Ezekiel. The 37 years of Ezekiel are the 37 years which extend, in the antechamber, from the entrance to the centre of the stone, or from 1963 to 2000 . Thus we find our interpretation of Rev. XI. entirely confirmed, according to which the Two Witnesses are none other than Israel and Judah. The numbers which are assigned to them in the Apocalypse (XI., 2, 3) had already led us, now more
than two years ago, precisely to the two dates 1963 and 2000 , which we have just found. ${ }^{1}$

In the Apocalypse the two witnesses prophesied clothed in sack. cloth during a time which terminates in 1963 : in Ezekiel, the term of years during which they bear their iniquity ends in 1963. In the Apocalypse, as in Ezekiel, they must bear witness; this witness, in its concrete form, is the temple described by Ezekiel; and the Pyramid, serving as a key, first to the Apocalypse and then to Ezekiel, assigns the year 2000 in both cases as the central date of this external manifestation. ${ }^{2}$
(II.) This clear identification of the two limits of the space of 37 years in Ezekiel, following the proofs already accumulated in this work, is of a nature to remove all doubt as to the inspired character of the Pyramid. But this demonstrative force becomes greater as we analyse other features of the prophecy. The space of 37 years appears in Ezekiel to divide itself into two parts: (a) a first part, in which the dates are accumulated-5th, 6th, 7 th, 9 th, roth, 1 rth, 12th years of the Captivity-and which lead, in the 12 th year, to the celebrated prophecy of the bones restored to life and of the two sticks, that of Israel and that of Judah, re-united in the hand of the prophet; this refers, as the book of Ezekiel expressly tellsus, to the re-union of Israel and Judah into one kingdom, in the midst of which will be raised, as witness to the nations, the sanctuary of the eternal; (b) a second part, chronologically twice as long as the preceding, but in which no dates are given except the 25th, the 27 th and the 30th years; among these the 25 th almost entirely absorbs the attention, because it is that of the prophecy which contains the whole description of the Temple and the City-

[^57]that is to say, of the testimony which Israel and Judah must raise after their re-union.
In the Pyramid, this subdivision of the 37 years into two parts exists in an identical manner; the first extends from the entrance into the antechamber, $1963^{\circ} \cdot$, to the north edge, $1999 \cdot 825-23^{\circ} 60$ t $=1976.224$, of the granite stone; the second, from this edge 1976.224, to the centre of the stone, 1999.825. We have then in the Pyramid to consider the three points of subdivision-
$$
1963.2 \quad 1976 \cdot 224 \quad 1999 \cdot 825
$$
and in Ezekiel, by adding 2580 to -617, -605 and -580 , the three numbers
\[

$$
\begin{array}{lll}
1963 & 1975 & 2000 .
\end{array}
$$
\]

(The number 1975 of Ezekiel would be more correctly written 1976, for it is the end of the 12 th year which is indicated in the prophecy (see XXXII., I ; XXXIII., 21), and consequently -605 ought to be more correctly replaced by -604 , which brings out $2580-604=1976$.)
We have thus, in the Book of Ezekiel, in the most unequivocal manner, the explanation of the beginning of the granite in the chronological scale of the Pyramid. The beginning of the granite is the reunion of Israel and fudah, the Two Witnesses, in one indestructible kingdom. Then the Almighty will anoint them a King after His own heart, and the establishment of this kingdom is the antitype of the first establishment of the kingdom in Israel-of that first establishment in which Israel did not listen to the voice of the Eternal.

The beginning of the reign of Saul, the first king, was - II2O (last year of the reign of Solomon, -rooo; reign of Solomon, 40 years; reign of David, 40 years; reign of Saul, 40 years). The duration 2580 years of Ezekiel is equal to $5 \times 516$; 6 periods of 516 equal $6 \times 516=3096$; and we have 1976 . $-3096=-1120$. There are then exactly 6 historic periods, such as Ezekiel indicates, between the first establishment of the Kingdom in Israel and that which will characterise the reunion of Israel and Judah in 1976. We find, then, in all this not only an in-
dubitable determination of the epoch 1976 for the future reunion of Israel and Judah in Palestine, but a new demonstration of the perfect exactitude of the literal chronology of the Old Testament.
(12.) To the 25th year of Ezekiel - 592 belongs the great descrip. tion of the Temple. Now, this number corresponds in the Pyramid to the middle $1999.825-\frac{23.601}{2}=1988.025$ between the north edge of the Stone and its centre. For we have $-592+2580=1988$. Such, probably, will be the date of the foundation of the Temple, and it corresponds to that of the Great Pyramid, situated on another meridian; the date of the foundation of the Pyramid from the numbers of M. Flinders Petrie, is $\mathbf{- 2 1 7 3}$. Now, we have
and

$$
8 \times 520 \cdot 165=4161 \cdot 320
$$

$$
1988-416 \mathrm{I}=-2173 \cdot{ }^{4}
$$

(13.) We have just considered the whole, 430 years, of the two periods 390 and 40 years of Ezekiel relative to Israel and Judah. But it is now necessary to find those composing periods themselves in the Pyramid. They are found there in the most amazing manner, and, which is remarkable, with a reproduction of the change of direction mentioned in Chapter IV., 4-8, of Ezekiel.
The history of Israel, we have seen, is symbolised by the horizontal passage and the Queen's Chamber; it is there that we must therefore seek the verification. It will teach us that this chamber concerns Judah also.

In the Pyramid, the 390 years of Israel end, following the horizontal direction, at the further end of the Queen's Chamber; and the 40 years of Judah count afterwards, in the vertical direction, from the floor to the summit of the vault of the chamber. The beginning of the 390 years is -617 ; the chamber ends, horizontally speaking, in 1727 . Now, in Ezekiel's years, we have

[^58]$\frac{1727+617}{6}=390^{\circ} 7$. The height of the chamber is $244^{\circ} 6$, that is, in the years of Ezekiel, $\frac{244^{\circ} 6}{6}=40^{\circ} 8$. We obtain, then, from the integers of these quotients, the two numbers 390 and 40 . As to the systematic correction 0.7 to 0.8 , it is indicated in the chamber by this same displacement or eccentricity 5.65 , which has already been used above (see §33) to effect a correction in the chronological scale. 1727 and $244^{\circ} 6$ become, by subtracting $5.65,1721.4$ and $239^{\circ} 0$; and $\frac{1721.4+617}{6}=389^{\circ} 73=390$, and $\frac{239^{\circ} 0}{6}=39^{\circ} 83=40$.

Ezekiel is laid upon the left side for Israel, upon the right side for Judah. Now the observer lying upon the chronological scale of the Queen's Chamber, and in a line from foot to head with this scale, if he is placed upon the left side looks West, towards which Israel is advancing to the Isles of the West; whilst upon the right side he looks towards the East, that is towards Palestine, in the direction of the return of Israel and Judah into the prophetic East. He looks then also to the niche, where is to be found the standard of measure, the sacred cubit, and which is itself the symbol of the Temple to be raised to the Eternal.
(14.) The ro days of tribulation of the Church of Smyrna in Rev. II., Io, which have been explained (§ 117 ), and which concern (British) Israel, are found again in the 390 years of Ezekiel. As we have said, it is necessary to take into consideration the numbers of 30 years and of 7 years, which are brought out at the beginning of the book of Ezekiel as if to indicate that they will serve as a key to important deductions. The 390 years constitute 10 days of 39 years; now the 30 ordinary years of which we have just spoken, constitute $\frac{30}{6}=5$ years of Ezekiel ; $39+5=44$; ten days equal to 44 give 440 years of Ezekiel or $6 \times 440=2,640$ years; these are precisely the 2640 years to which the Apocalypse leads us and which give the significant result $-75^{8}+2640=1882$. $-75^{8}$ is the date of the Dispersion of the 10 Tribes and 1882 that of the return of British Israel (into Egypt).

My brother, M. Léon Lagrange, whose remark that the witness Antipas of Revelation, II., 13, represents Christ, gave me the first hint for my interpretation of the Letter to the Seven Churches, has made two observations upon the present subject which I add to my own.

1. The 40 years (XXIX., 12 ; XXX., 13) relative to Egypt find their interpretation as follows. The 40 years of Ezekiel make $6 \times$ $40=240$ ordinary years, and 10 of these days make 2400. By adding the 7 years of which we have spoken above, this number becomes 2407. Now, the destruction of the last of the Egyptian dynasties took place in -525 (Cambyses, Persian), and we have $-525+2407=1882$, the epoch of the regeneration of Egypt, after 24 centuries, by British Israel.
2. The 7 months of XXXIX., 12, 14, relative to Gog and Magog, give $7 \times 29^{\frac{1}{2}}=206.5$ years, that is to say, one length of the King's Chamber; which seems to indicate that, in Ezekiel as in the Apocalypse, events subsequent to the entrance of the Lord into His kingdom are concerned,

## A POSTSCRIPT.

## CLOSING THOUGHTS OF VITAL IMPORTANCE.

Zechariah's Prophecy.

MORE than two years have elapsed since this work was first written (Oct.-Nov., 1891). Since then all my reflections on the subject have fully confirmed my first deductions. The five preceding Appendices, issued for the first time with the present volume, are a proof of that confirmatory agreement.

I desire especially to draw attention to the fact, which has never been lost sight of in this work, that the true object of any study of God's Word must be edification.

The diagram of the Pyramid, considered in its general form is speaking; it teaches the essential truths of salvation by means of a representation comprehensible even to children. Churches should make this diagram generally known.

The reader has already been enabled to appreciate the great value of this Pyramid's teaching from a spiritual point of view; without speaking anew of the unexpected light which the Pyramid throws on the "Letters to the Seven Churches," consider, for instance, this plain external
fact: the perfect agreement between the Great Pyramid and the literal chronology of the Bible, that is to say $a$ chronology not for savants alone, but such as an ordinary reader is able to trace for himself. ${ }^{1}$

It is therefore incumbent on every Christian to possess himself of a personal material proof of the exactness of his Bible; of course, this confidence will increase his faith, make his study of every part of God's Word more fruitful, and give him power to answer victoriously the arguments of Incredulity.

Another example is afforded by the theory of Identity, now so clearly grounded, and without which the greater part of the Prophetic books remain incomprehensible. When having earnestly followed the development of our study, we come to the numerous proofs afforded by the book of Ezekiel, we can no longer doubt the fact. I presume the facts contained in Appendix V. will produce on the reader the same striking effect they have produced on myself.

The supporters of the theory of Identity will find in the Pyramid not only the most powerful but the most popular of arguments. The hidden life of the ten tribes is one of the most evident and characteristic features of the diagram of the Pyramid (Horizontal Passage and Queen's Chamber). The mere sight of the diagram is destined to teach the Church a truth whose development pervades

[^59]the whole Bible. This truth will at last be universally accepted.

Now it is precisely to this great fact, considered in relation to edification, that this postscript is mainly devoted, and if I feel bound to speak of it in this aspect of edification, it is because the Great Pyramid throws an unexpected ray of light on the Biblical interpretation of that fact, and is destined to cancel a lamentable misunderstanding which exists on that point among Christians.

Those Christians who recall the Word of the Lord Himself: "Begin not to say. . . . we have Abraham for our father" (Luke III., 8), feel terror at the thought that they must rejoice in the material possession of "the gates of their enemies," and the excess of individual or national pride which, possibly, will be called forth by that view, is not far from inspiring them with the desire, either to deny the fact itself of the Identity, or even to be among their brothers the Gentiles, who are spared such a trial. In any case this feeling makes them naturally adverse to the theory of Identity.

On the other side, the scientist, whose part it is to establish the facts, whatever they may be, feels obliged to consider that Identity as a demonstrated fact.

In such a situation, what will be the state of mind of the Christian Anglo-Israelite, who sees that faith and external science are equally parts of truth and cannot expel one another ?

How will he reconcile the duty of equality between all the children of God and his rank as a member of the chosen people, destined to conquer the world materially ?

Knowing personally that such difficulties cause separation between very good Christians, of whom some support one side of the question, while others take the opposite view, and being persuaded that each side possesses part of the truth, I would beg to be allowed respectfully to present to both sides what seems to be the solution of the whole. I address myself to men who, equally as Christians and as scientists, seek earnestly the truth, and esteem it useful that every honest argument be brought forward for discussion.

In any case, I speak not on my own authority; what I maintain is that, to the question above spoken of, Scripture on one side, the Pyramid on the other, give the most positive answer, presenting a radical solution destined to calm every apprehension of Christian feeling.

This solution lies in the fact that the temporal power of British-Israel is in intimate connection, if not identical, with that of the Great Babylon of the last days, in such a way that the true Israelists, i.e., true Christians in Israel, will remain like all other Christians in other nations, as the Church of Christ has always done, lost in the whole mass, despised and persecuted by the world, until the coming of the Lord. This solution, I say, will be accepted by them as a blessing, because by it alone will they be allowed to continue seeking without intermission for peace such as Christ gives, and not such as the world pretends to bestow.

Proofs supporting this view are superabundant, pervading all prophecy. It will suffice for us here to point out briefly some of the most momentous.
(I) According to Daniel (XI., $4 \mathrm{I}, 45$ ) the last power, that which shall have Egypt under its rule (XI., 42), and whose period of domination immediately precedes the coming of the Lord, shall fall in its turn (XI., 45), like those which have preceded it; and, in the verse immediately following (XII., I), by " thy people" the prophet means "every one that shall be found written in the book."

Now, the historic law and the Pyramid in agreement with Daniel, also present that power, British-Israel, as the last one in a series of ten worldly powers.
(2) In the Apocalypse, the Great Babylon belongs to the very last days, those of the coming of the Lord. Then it exists at the same time as British-Israel ; it is depicted as a commercial nation seated on the Beast (Rev. XVII., 3), possessing a universal domination, and we know (Hosea XII., 7) that Ephraim is " a merchant." ("The balances of deceit are in his hand;" compare this with Rev. VI., 5,6 , as a confirmation of our interpretation of this last passage in § 62.) On the other hand, the two witnesses, the two olive trees, the two candlesticks (Rev. XI., 3, 4) or the true Israel and Judah, the true Christian believers are in these last days overcome by the Beast, and their dead bodies shall lie in the street of the great city. (Rev. XI., 7, 8) (§§73-77). So, in the Apocalypse as in Daniel, the true Israelism in which "is no guile" (John I., 47) is quite distinct from the worldly power of British-Israel. This unique fact, that it is said in these last days, the days of the Great Babylon, "come out of her my people" (Rev. XVIII., 4), proves that, in the last days, the people
of God shall be in the Great Babylon. But on the other hand, where is this people if not in British-Israel ?
(3) In Ezekiel XXIII. are presented the "two women," "Aholah and Aholibah," who commit "whoredoms" (Ezek. XXIII., 2, 3, 4). They are a counterpart of IsraelJudah, the two witnesses of the Lord, "the two anointed ones, that stand by the Lord of the whole earth" (Zech. IV., 14). First (5-10) comes the story of Aholah (Samaria); then follows ( $11-35$ ) that of Aholibah (Jerusalem), who shall be filled with the cup of her sister Samaria (33). After that, the two women are presented together, having "defiled my sanctuary in the same day" (38), and in verses $40-43$ a (third) woman is spoken of in the singular "that playeth the harlot," serving here as a type of those in the last days, "old in adulteries," and connected by evident features of resemblance with the Great Babylon in the Apocalypse. Compare in Ezek. XXIV. and Rev. XVIII., respectively, 34 with $6 ; 41,42$ with 3 , II-I3; 45 with 20 ; 47 with 2 I , etc. Chapters XXVII., XXVIII. on Tyrus, which should also be compared with Ch. XVIII. of the Apocalypse, are only applicable to the times to come (see XXVII., I3, 14)-times of the power and domination of British-Israel (XXVIII., II-19). Is not this people the same which, in Daniel (XI., 45) plants " the tabernacles of his palace between the seas in the glorious holy mountain ?" One fact should here be sufficient to support the thesis: Tyrus is a "ten tribed nation." Compare Ezekiel XXVIII., I3, with Rev. XXI., 12, 19-2 I.
(4) The Pyramid, itself, confirms the previous induction. The period of British-Israel as chief nation, the
last of the ten quincentennial periods of history, is symbolised, as has been shown, by the horizontal floor BT (Fig. III.). Now, the number of the Beast, which is also the number of the Great Babylon, seated on the Beast (Rev. XVII., 3, 5), is written in the most striking manner before whosoever shall enter the phase of maximum power, the so-called apogee of British-Israel, i.e., the second low passage, KP ; for on the south wall of the Antechamber, between the ceiling and the top of the passage door, there are three vertical spaces, forming a frontispiece, comprised between four vertical equidistant lines, the breadth of each space being 6 inches; ${ }^{1}$ that is to say, the number 666 is written there in the most conspicuous and unavoidable manner in the "forehead" (Rev. XVII., 5) of the worldly domination of British Israel.

But we have not done with that. The Great Babylon is "seated" upon the Beast; now, just as the Beast walked, in the horizontal passage leading to the Queen's Chamber, in the confusion expressed by its number $6 \times 6 \times 6$ (§85), so British-Israel walks along the horizontal floor BT (Fig. III.) in this same confusion, for the

[^60]total length FP (Fig. III.) of the floor of the Antechamber and of the second low passage, i.e., of the phase of religious inspiration (organisation) and of the phase of material power (apogee), is equal to $116 \cdot 26+100 \cdot 2=$ 21646 , or $216=6 \times 6 \times 6$.

Lastly, the floor PT of the King's Chamber corresponds to the phase of degradation and corruption of the period of domination of British-Israel, and as we have previously been led (§ 19) to divide the floor of the chamber into twohorizontal rectangles, whose perimeters pointed out the period of the life of nations, we are now led to consider, in a vertical plane, the two rectangles constructed, under the floor, on the two half breadths TR, RP and the lift $\mathrm{TT}^{\prime}$; each of these rectangles has a perimeter equal to $2(\mathrm{IO} 3+5)=216=6 \times 6 \times 6$.

The axis of the King's Chamber marks the definitiveestablishment of the Reign; and so, it is literally, i.e., geometrically, true that " He will throughly purge his floor" (Matt. III., 12), and "bruise Satan under your feet" (Rom. XVI.; 20.). We see that in every way the Great Babylon is, in the Pyramid, intimately connected with British-Israel.
(5) What precedes is sufficient to establish our view of the subject. And yet we can render it more precise and more sure by quotations from the Book of Zechariah. We have just taken the Scripture and the Pyramid successively into consideration. The wonderful prophecy of Zechariah connects the one with the other; and the Pyramid alone makes it intelligible. We mean here mainly the characteristic imagery of Chap. V. of Zechariah, which
will give us a most striking confirmation of all our previous deductions.

We do not intend to make a general study of the Book of Zechariah; we shall only say what is necessary for the explanation of this remarkable and decisive part.

In the Book of Zechariah, as in the Book of Ezekiel (Ezekiel I.-XI.), there is an introductory part summing up the whole of the subject. This part extends from Chap. I. to Chap. VI.

The first verses of Chap. III. introduce two powers opposed to each other in the future story of the chosen people : the faithful priests of God and the Prince of this world. Chap. IV. relates to the first of these two powers; Chap. V. to the second.

We see in Zech. IV., I, the prophet "wakened out of his sleep," i.e., out of the historical sleep he has slept for Israel and Judah (see Ezek. IV. and our Appendix V.), and then he sees indeed the true Israel and Judah, i.e., the "two olive trees" (verse 3), "the two anointed ones, that stand by the Lord of the whole earth" (verses 12, 14; and Rev. XI., 4, 10).

These are "Zerubbabel" (verse 6), i.e., according to the meaning of the name, the exiled in Babylon; for a spiritual eye, the worldly power of British-Israel, the "great mountain" (Dan. II., 35, 45), will be "before" them (7), or in respect to them, as nothing.

In their hands shall be the plummet; they "have laid the foundation of this house ;" they "shall also finish it" ( 9,10 ).

In opposition to Chap. IV., Chap. V. presents Israel
and Judah in so far as they are defiled by the world (I John II., I5, I6).

They are figurated by "two women" (9) impure (by their wings like the wings of a stork" (Lev. XI., I3, 19 ; cf. with Rev. XVI., 13) ; these are the two whores of Ezekiel XXIII. And what do these two women do? Here, as in Ezekiel, they are connected with a third who is "wickedness" (8), and they build, in order to establish her, a house in the land of Shinar (II), i.e., in the Babylonian country; there she will be set upon her own base (II), i.e., on the Beast (Rev. XVII., 3).

This third woman is in every way well identified with the Great Babylon: this Great Babylon is a " mystery " (Rev. XVII., 5), a hidden iniquity (2 Thess. II., 7); and, in Zechariah, the third woman is a "wickedness" (8) hidden by means of a "weight of lead" (8), the vile metal, in opposition to "the two golden pipes" and " the gold" of "the two anointed ones" (IV., 12, 14).

Moreover, in what place is this "wickedness" hidden? In the midst of an ephah (V.7), the capacity measure for corn (Ezek. XLV., IO, I I, I3, 14), i.e., in the midst of the "corn of my floor" (Isa. XXI., IO), of that wheat which the Lord shall " gather into the garner" (Matt. III., I 2). And the introduction of this geometrical element leads us of itself to the Pyramidal interpretation of this very clear prophecy.

First of all, we observe that Zechariah being here, as is conspicuous from all that precedes, in close connection with Ezekiel, we are very probably meant to make use of Ezekiel's units; these have been mentioned in Appendix V.

It is indeed the case; and from this we immediately get a new verification of our supported view. For the ephah (Zech. V. 7) in which is the wickedness, the Great Babylon, being an ephah of Ezekiel (XLV., II), and being a capacity measure, i.e., a volume, is equal to the normal ephah (Lev. XIX., 36) multiplied (see Appendix V.) by the fatidical number $6 \times 6 \times 6$.

But let us proceed with order. The prophecy of Chap. V. is written on "a flying roll; the length thereof is twenty cubits and the breadth thereof ten cubits. . . . ."; i.e., a roll whose dimensions are as 2 to I , because on it is written the story of the two parts of one chosen people. "This is the curse that goeth forth over the face of the whole earth" (Zech.V., $1,2,3$ ). The roll gives us the idea of a cylinder or tube, the surface of which is $20 \times 10=$ 200 square cubits; or, if the question is here of Ezekiel's cubits, i.e., reeds, $6 \times 6 \times 200=7,200$ square pyr. cubits, of which the hundredth part is 72 square pyr. cubits.

Look at the Pyramid (Fig. III.). We have to consider, reposing on the horizontal floor of British-Israel's period, a tube formed by the first and second low passages (II. and IV. on the plan) supposed to continue uninterrupted across the Antechamber; this tube or "roll," whose length is then DP, will end in P at the second coming of the Lord, and begin in D, i.e., precisely at the "curse that goeth forth over the face of the whole earth," this curse consisting of the seven thunders (Rev. X., 3) symbolised by the characteristic south end fD . of the Grand Gallery. (See our §47).

Suppose this tube or "roll" to be unfolded, and its
surface calculated. M. Piazzi Smyth gives for the height of the passage, numbers varying from $42^{\circ} 0$ to $43.7^{1}$ pyr. inches, mean $=42.85 \mathrm{pyr}$. inches; the breadth is 41.4 and we have $\mathrm{PD}=100 \cdot 2+116 \cdot 26+52 \cdot 5=268.95$. The surface is then, in square pyr. cubits,

$$
\frac{2(41.4+42.85) \times 268.96}{25 \times 25}=72.49
$$

i.e., the square cubits just given by the roll of Zechariah. The agreement must be considered as quite satisfactory, if we remark that the difference 0.49 would correspond only, as may be shown, to an error of a fraction of half an inch on one of the multiplied factors. (The exact value 72.00 would correspond to a height of the passage equal to $42^{2} 28$, i.e., a height comprised between the two limits just given above.)

In any case, it is a fact that, in the whole number of square cubits, the result is 72 , i.e., the roll of Zechariah divided by 100 .

Now, how about the ephah (Zech. V., 6-II)? From what has been said previously ( $\$ 4$, p. 268), we are induced to think that it corresponds to that portion of the tube running along the Antechamber and the second low passage, as we have (Fig. III.) FP $=6 \times 6 \times 6$. Well, we shall see that the volume of this portion of the tube or "roll" is in effect equal to an ephah.

The ephah is equal to the bath, and every student of the Pyramid knows that the coffer in the King's Chamber, a coffer whose volume is 71250 cub. pyr. inches, contains

[^61]40 baths. Then, since I reed-inch, or I Ezekiel's inch is equal to 6 pyr. inches, we have

$$
\begin{aligned}
\text { I Ezekiel's ephah } & =\frac{71250 \times 6 \times 6 \times 6}{40} \\
& =384750 \circ 00 \text { cub. pyr. inches } \\
& =24.624 \text { cub. pyr. cubits. }
\end{aligned}
$$

And for the volume of the tube-portion FP,

$$
\begin{aligned}
42 \cdot 85 \times 4 r^{\circ} 4 \times 216 \cdot 46 & =383997 \cdot 88 \text { cub. pyr. inches } \\
& =24^{\circ} 576 \text { cub. pyr. cubits. }
\end{aligned}
$$

i.e., the "ephah."

Can any doubt remain, after such a confirmation, relative to the volume of the ephah, coming after that already furnished by the measure of the surface of the "roll" ?

Many subsidiary remarks may be made; for example, in Zechariah we see that the ephah which contains the hidden wickedness is closed on every side; and if we seek for its total surface, we find it equal to 64.03 , i.e., $64=2 \times 2 \times 2 \times 2 \times 2 \times 2=2^{6}$ square pyr. cubits; and here we see again the two parts of the chosen people connected with the fatidical worldly number six.

The wickedness is, in Zechariah, V. 7, "in the midst of the ephah"; in Ezekiel, XXIII., 39, it is established "in the midst of my house." Now, we shall see that the centre of the ephah is indeed midway between two remarkable points, belonging both to the beginning and the ending of the prophecy in our last days. The first point which concerns the end, is the Axis $R$ of the King's Chamber, or the definite establishment of the Reign. It is obtained by adding to $\mathrm{P}=2179.66$ the half-breadth 103.3 of the King's Chamber. The second can then be
obtained by subtracting 103.3 from $\mathrm{F}=1963.2$. Now $1963^{\circ} 2-103^{\circ} 3=1860^{\circ} 2$, i.e., on the first ascending chronological scale OW (Fig. III.), the point where it is cut by the vertical line passing through $f$, the southern end of the ceiling of the Grand Gallery ; from fto D, along f D are drawn the Seven Thunders; the vertical line drawn from f , cuts DB at a distance from D equal to $\frac{1}{3} \mathrm{DB}=20.3$; and it cuts WA at a distance from W equal to

$$
\frac{1}{3} \mathrm{WA}=\frac{188 \mathrm{r} \cdot 76-1813 \cdot 7}{3}=\frac{68 \cdot 06}{3}=22 \cdot 69 .
$$

The first point, on DB, is $1910 \cdot 7-20.3=1890^{\circ} 4$, or, as has already been remarked, the present epoch (see §49) ; and the second, on WA, is $188 \mathrm{r} \cdot 7 \mathrm{~F}-22.69=$ 1859.07; and we have just found $1963.2-103.3=$ 1860. 2.

Now, this $1859^{\circ} 07$ or $1860^{\circ} 2$ was the very epoch of the first revelations concerning the sacred character of the Great Pyramid, and the great fact of the Identity. John Taylor's, and Glover's wonderful books were published respectively in 1859 and 1860 . We have already seen how the appearance of M. Piazzi Smyth's and Brück's works is, on the horizontal chronological scale, in accordance with the period of testimony. (See $\S_{\S} 76$ and 116 ).

Each of the two chronological scales then possesses, in this respect, its own characteristic points of indication, and it is well worth noticing that all these necessary elements of the general theory and interpretation of the question concur precisely at the chronological point 1890-91, i.e., at the intersection of the horizontal and vertical lines drawn through these foretold points. The horizontal line is
drawn on the floor of the Great Step ; the vertical line is the vertical of $f$, at the southern end of the ceiling of the Grand Gallery, $f$ being the point whence the seven thunders or the curse which is over the whole earth (Zech. V., $1,2,3$ ), are issuing.

Moreover, it must be noticed that the "midst of the ephah," the "midst of my house," is precisely distant 6 historical periods of 516 years, or 3096 years, from the centre-1026 (see § 12 and I Kings IX., Io) of the construction of the Temple and Royal House by Solomon; for we have

$$
-1026+3096=2070
$$

and the centre of the ephah is

$$
1963.2+\frac{216.46}{2}=2071.43
$$

The reflections we have presented, and to which we could add many others, show how deeply interesting to Christians is the study of the last period (BT, Fig. III.) now opened before them.

Summing up all the preceding stated facts, we must conclude in a calm, scientific and Christian spirit:
(I) That Anglo-Israelism is true; Israel-Judah, in accordance with the promises, will have the dominion of the world. This part of the truth is perfectly well established.
(2) That, for the second time, the first corresponding to the reign of the Eighth King (see our interpretation of the Apocalypse), there will be a confusion, an adulterous union of the World and the Church; the last great power is seated on the Beast.
(3) The faithful ones, the members of the body of Christ, the true Church, whether Israelites from the flesh, or not, will protest against this adultery, and instead of being happy, rich and favoured by the worldly Israel-Judah, they will be despised and persecuted in every possible manner.

Even in our own days, we can foresee this future state of things. Many proofs might be given. Need we, for example, recall here such reflections as those made in a recent number of the Banner of Israel (21 February, 1894, the National Defence, p. 100), and which deplore the present state of minds as pointing out a "shameful fact, offensive to our God who has chosen us, sent us forth nationally to bless the inhabitants of the world."

Need we note the warnings of that terrible book "Fifty Years in the Church of Rome," by Father Chiniquy, which advises English, Anglo-Saxon nations of the danger to which they are exposed from the Church of Rome, whose attempts to absorb power are always increasing ?

It seems to us useless to insist. We have thought it interesting to signalise every point of view, in studying earnestly the coming of the solemn times before us.
1 Light will increase more and more, as time lengthens; and the boldest inquiries need not be feared, if that " kindly light" leads us, which is life and truth in the Lord.

Ch. Lagrange.
20th March, 1894.



Fig. III.




Fig. VI.


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IN

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[^0]:    1 See especially his quarto book entitled "Etude sur le Système des Forces du Monde Physique." Printed and published by M. Hayez, Rue de Louvain 118, Bruxelles.

[^1]:    ${ }^{2}$ I mean here (for the Old Testament) the Hebrew text. The text I have generally used in this work is the well-known translation of David Martin (Amsterdam, 1722) ; but the reader can well also make use of the Vulgate.

    3 "Life and Work at the Great Pyramid during the months of January, February, March and April, A.D. 1865 ," by C. Piazzi Smyth, F.R.S.S., L. and E. 3 Vols., 8vo. Edinburgh, 1867.

[^2]:    ${ }^{1}$ See of this author besides "Life and Work," already quoted, this book, "Our Inheritance in the Great Pyramid," I Vol., 8vo. London, 5 th edition, 1890.

[^3]:    ${ }^{1}$ The date of the Pyramid, given by itself, is -2170:
    ${ }^{2}$ Its discovery dates only from the ninth century (made by Al Mamoun, son of Haroun Al Raschid, in 820).

[^4]:    ${ }^{1}$ Pascal.

[^5]:    ${ }^{1}$ Of course, in all this we set aside those anomalies which, in the examination of all great natural laws, constitute a study of the second order only.

[^6]:    ${ }^{1}$ We must further, as Quetelet remarks ("Physique Sociale," Vol. II., p. 219), understand by a nation, not a race, but an association of individuals, organised either for the defence of purely material interests, or for that of material interests engaged in the service of an idea.

[^7]:    ${ }^{1}$ The known claim (which is otherwise not grounded) to an official gift from Constantine indirectly confirms the accuracy of this opinion.

[^8]:    1 "Physique Sociale," vol. ii., pp. 217 and the following.

[^9]:    ${ }^{1}$ All the details relative to the following will be found in the work by C. Piazzi Smyth : Our Inheritance in the Great Pyramid, I Vol., 8 vo , xx. $-45^{2}$ pages, Twenty-five Plates. London, 5 th Edition, 1890.

[^10]:    ${ }^{1}$ The metric system of the Pyramid is none other than that which Sir John Herschel proposed in 1869 (his geometrical inch $=$ $\frac{1}{\text { wo.voo.000 }}$ of the length of the earth's axis, is the Pyramid inch of M. Piazzi Smyth). Herschel very justly censured the irrational character of the metre. It is the axis of rotation, a straight line, a diameter common to all the meridians, which should furnish the unit of length for the earth; it ought not to be a meridian, which is a curved line and variable in longitude. "The metric idea was not a blunder only; it was a sin against geometrical simplicity."

[^11]:    ${ }^{1}$ Given in extenso in Our Inheritance, 4 th edition.

[^12]:    ${ }^{1}$ The chronology of the Bible has hitherto been so much subjected to the influence of interpretations and hypotheses, that the entrance of the descending passage (the entrance of the Pyramid) is considered by M. Piazzi Smyth as giving the date of the Dispersion of the Nations, and by others as indicating the epoch of the Deluge.

[^13]:    ${ }^{1}$ An imaginary meridian, which we may a priori assert, being founded on the very existence of the law itself, responds to a physical reality proper to the organisation of the globe.

[^14]:    1 "A time and a time." Thus translate Martin and the Vulgate.

[^15]:    ${ }^{1}$ Brück concludes his preface by saying: "The old man and the youth are brothers in Jesus Christ, and owe each other love for love. They cannot better testify their love than by helping each other.
    "What is true for individuals is true for nations. Christian nations! whatever be your age, your qualities and your power, you are brothers! You are not born to destroy one another, but to aid one another.
    "Woe to those among you who shall forget it!
    "I will conclude by remarking with joy on the progress which fraternity has made in this century among nations and among. men, and by praying God that ulterior progress may be realised, that the immediate crisis may be ended, that the present epoch of dislocation may be passed, and the future Christian community constituted on the best possible basis, with the least disorder and the fewest calamities."

[^16]:    ${ }^{1}$ These hidden revelations probably concern the Translation of the Church and its epoch.

[^17]:    ${ }^{1}$ See the measurements of M. Flinders Petrie, loc. cit., p. 25.
    ${ }^{2}$ Life and Work, Vol. II., p. go.

[^18]:    ${ }^{1}$ For the parallelism between this passage in the Apocalypse and Dan. VII., 7, 8, 11, 12, 19-27, see the note at the end of § ror.

[^19]:    ${ }^{1}$ The nature of this principle explains the extreme wonder of Saint John (XVII., 6).

[^20]:    1 "Etude sur le Système des Forces du Monde Physique," pp. 330555 (Mem. Acad. des Sc. de Belgique, t. XLVIII.). Experiments concerning the movements of freely suspended bodies not magnetic (experiments to which I was guided by theory) have been made, since the publication of this memoir, in order to verify the reality of the circulation of the material ether of the globe; this circulation is a fundamental thermic factor of it, and upon it depends the movement of the magnetic needles as well as that of those which are neutral.

    On this head see the review, "Ciel et Terre," 1892 , Nos. 3, $1 I_{1}$ 12 and 15 .

[^21]:    ${ }^{1}$ See " Etude, \&c.," p. 551.

[^22]:    ${ }^{1}$ The duration of this period is "about the space of half-anhour " (VIII., I). It concerns facts which relate both to the Church and the world, and which belong to history properly so called. The end of the period is +330 , according to the continuation of our Text, that is, the constitution of the temporal power of the Roman Church; the event with which it naturally begins is the destruction of the Temple (Dispersion of the Jews) in +70 . The length of time $330-70=260$ is "about" equal to $264=\frac{828}{8}$, the half of Daniel's period which we shall discover hereafter. Concerning the expression, "half-hour," see the note $\S 99$ and $\S 100$.

[^23]:    ${ }^{1}$ Absynthe, Arius? Bitterness; Comp. X., 1o. Mahomet is also called messenger, star; IX., I, and I., 20.

[^24]:    ${ }^{1}$ From which it follows that the Bible, which had already related the antediluvian period, but which afterwards made the chosen people its special subject, thus contains in reality the entire history.

[^25]:    ${ }^{1}$ It is therefore probable that the numerous and very various data of the Antechamber have a symbolical connection with the prophetic description of the Temple of Ezekiel. (See Appendix V.)

[^26]:    ${ }_{1}$ That is, such names that the sum of the numerical values of the letters which compose them, estimated according to the Greek system of numeration, is equal to 666 .

[^27]:    ${ }^{1}$ Already in the time of Saint Paul the "mystery of iniquity " was preparing (2 Thess. II., 7).

[^28]:    ${ }^{1}$ A mysterious event, forming part of the sealed utterances of the seven thunders (X., 4 ; Fig. III., Da) and of which no one knows neither the day nor the hour (Matt. XXIV., 42). This fact is worthy of remark, namely, the manner in which the Apocalypse accords with the direct preaching of the Lord in the Gospel, affirming the existence of events of which, at the same time, a clear revelation, concerning either their epoch or their nature, is refused. The recognition of this harmony leads us to make the conjecture, which was alluded to in $\S 57$, on the reason for the systematic character of the difference between Daniel's numbers, relative to the period of a century which precedes the Advent of the Lord, and the numbers of the Pyramid relative to this same period of a century, represented by the second low passage (KP, Fig. III.). Whilst such an exact harmony exists between other parts of the system of the Pyramid and of the prophetic system, that even-a fact which is worth noticing-the number marked by the extremity of the chronological scale in the Pyramid, at the further end of the King's Chamber, exactly limits the four times of Daniel composing the life of the spiritual power of the eighth king, which was founded in 325 (see § 58), the numbers ot phase KP in the Pyramid and of

[^29]:    ${ }^{2}$ It is here (that is to say in the history of the Church) announced by a voice, and no longer (as in the history of the Chosen People) expressly by the 7 th trumpet; this indicates a difference between the dispensation relative to the Church, and that relative to the chosen people (probably the translation of the Church has preceded the second Advent), and should be compared with the remark in the preceding note.

[^30]:    1 "Life and Work," Vol. II., p. III.

[^31]:    ${ }^{1}$ Further on (§ ioo) we shall see that this great week includes seven of the twelve hours which elapse from the beginning (the fall of Adam) of the reign of the Prince of this world to the beginning of the Reign of the Lord. It is for this reason that "time" may be called "hour" and that the "half-time," as in the Apocalypse (Rev. VIII., I), is equivalent to " half-an-hour."

[^32]:    ${ }^{1}$ Martin and the Vulgate translate " at the same time," "in the same hour."

[^33]:    1 "Etude sur le Système des Forces du Monde Physique," pp. 545, 546 (Mem. Acad. Royale de Belgique, Vol. XlViii.).

[^34]:    ${ }^{1}$ The Church is the Body of Christ (Col. I., 24) ; the metaphor of the edifice of which the faithful are the stones, and of which Christ is the corner-stone, recurs often in Scripture; it is interesting to observe (M. Piazzi Smyth has already made the remark) that this

[^35]:    "rock" are two different substantives, which clearly indicates that two different ideas are intended. The first, Пєт $o s$, means properly a stone, a part of a rock; the second, Her $\rho a$, designates the rock itself. Thus Peter is called $\Pi \epsilon \tau \rho o s$ because the confession he has just made of Christ as Son of God makes him (and each of those in the name of whom he speaks, see the whole passage Matt. XVI., $15-20$ and especially 15 and 20 ) a stone of the spiritual edifice of the Church or a member of the Body of Christ; and the very confession of the name of Christ, whose instrument Peter is, which is in reality the work of God (Matt. XVI., 17) and creates in Simon a new man, having a new name, is the true principle, the rock ( $\Pi \epsilon \tau \rho a)$ upon which the Church of Christ shall be built. On the other hand, Simon is by his confession, "Made a partaker of Christ" (Heb. III., I4) ; he draws the substance which makes him a new creature from the very substance of Christ. If then the members of the Church are lively stones, Christ Himself is the rock from which they are hewn (it is the spouse, or Eve, who draws her substance from the husband). Thus the adverb "also" which accompanies the answer of Jesus to Simon is evidently explained. When Jesus immediately follows the declaration of Simon by these words, "I say also (Kayo $\delta \epsilon$ ) unto thee that thou art Peter," it is as

[^36]:    ${ }^{1}$ Since she is counselled to buy it of Him.

[^37]:    ${ }^{1}$ Historically, the parallel progress of the two movements, scientific and spiritual, which in reality form but a single scientific movement, is a fact. It is not so far from Copernicus and Kepier to Luther and Calvin; not so far from Pascal to Newton, nor from Pascal to Pascal. In a word, if science is modern, it is because personal Christianity is so.

[^38]:    ${ }^{1}$ It is singularly symbolised in the Pyramid by the horizontal floor which, like a lighthouse, commands the whole of the passages (see figure I.).
    2 "Étude sur le Système des Forces du Monde Physique," pp. 628-630 (" Mem. Acad. Royale de Belgigue," Vol. XLVIII.).

    One evident reason for the existence of the material world is to reveal by a symbol the spiritual world. Creation is a scripture. The highest truths are represented therein, and may be read as in a book: such is the sign of space, an infinite reality, incomprehensible and without definition; necessary to all, comprehending all, distinct from all, at once one and three (Rom. I., 20). (If real space were of more than three dimensions, the mechanical universe would appear to us essentially discontinued, as would be a universe of three dimensions for an animal plan.)

[^39]:    ${ }_{1}$ The north side of the lateral entrance of the lower extremity of the Well (See Fig. I.)
    ${ }_{2}$ The south side of this entrance.

[^40]:    ${ }_{1}$ The fact of the admirable movement to diffuse the Gospel during this century will suffice of itself alone to justify this last assertion.

[^41]:    ${ }^{1}$ See our Postscript : Closing Thoughts of Vital Importance.

[^42]:    ${ }^{1}$ The enemy of Catholicism is the Bible. We should be mistaken if we sought this enemy in Rationalism; Catholics do not fear the latter so much; they know well that they possess a necessary factor which Rationalism neglects, and the latter admits this, when it is not short-sighted; it would have liked to bring this factor, which is faith, into operation, by making use of Protestantism as an instrument; but it is as powerless to act through Protestantism without belief, as it is to contend with the Catholic Church without religion. Moreover it must be observed that Catholicism, by the confusion upon which it rests, is more of the world than it believes; and that the world in general, by this same compromise of spiritual and temporal interests which, at bottom, is only a trait of human character, is more Catholic than it thinks. In both are found a Pilate and a Herod who understand each other without confessing and often without knowing it.

[^43]:    ${ }^{1}$ La Fontaine, Fable 4, Livre ix.

[^44]:    ${ }^{2}$ Nothing is more contrary to the scientific rules of analogy and probability than the negation of positive religion, a negation which is so common in the present state of religious opinion. All that science knows best, reveals nature as a particular system chosen from an infinity of others equally conceivable. Thus this science itself by its narrowness has all the character of the positive religion which it repels.

[^45]:    ${ }^{1}$ Pascal.

[^46]:    ${ }^{1}$ We have seen how closely the numbers relative to the beginnings of humanity are linked to all the rest of the chronological system; so that it is impossible not to take literally what is said of the birth of Adam, of his temptation, etc. We have numerical proof that all these earliest facts, given as literally true, are so in reality.

[^47]:    ${ }^{1}$ According to our literal chronology of the Bible, the Philitis of Herodotus (Book II., § 128) might be Abraham, but Abraham is not the inspired architect of the Great Pyramid. The sojourn of Abraham in Egypt took place between -2161 and -2150 (Gen. XII., 4, and XVI., 16), and the construction of the Pyramid from -2170 to -2150 (Her., ibid., § 124). Abraham was therefore in Egypt during the construction of the Pyramid, but he could not have been there at the epoch of its foundation ( -2170 ). Is it not, therefore, remarkable to establish, as a new verification, that the journey of Abraham into Egypt, and his chronology mentioned in the Bible, agree with the chronology of the Pyramid, in such a manner as to explain the passage of Herodotus relative to the shepherd, or pastor Philitis, and to the impiety of Cheops, who caused the Egyptian temples to be shut.

[^48]:    ${ }^{1}$ See, for the demonstration of this point, " Etude sur le Système des Forces du Monde Physique," pages 564 and following, in the "Memoires de l'Academie Royale de Belgioue," Vol. XLVIII.

[^49]:    1 The Gospel constantly gives a charge to expect the return of Jesus Christ; this return occupied the thoughts of the primitive Church : but now, even in the evangelical Church, it is nowhere the subject of general preoccupation nor of positive teaching.

[^50]:    1 "New Measures of the Great Pyramid by a New Measurer," p 27.

[^51]:    ${ }^{1}$ Banner of Israel, January 3, 1894.

[^52]:    ${ }^{1}$ i.e. $100 \times 36524$, or a hundred times the number of solar days in a tropic year.

[^53]:    ${ }^{1}$ See " Our Inheritance," etc., 5th edit., p. 384.
    2 At the beginning of time, in an ideal case, we may admit $\alpha=\frac{1}{2}$; in our times, the observed values are $\frac{3}{3}$, $\frac{1}{4} 0, \frac{1}{2}$, etc.

[^54]:    ${ }^{1}$ As an interesting verification of our interpretation of Ezekiel's " wheels," we can notice here that in his great work "Le Grand Tableau de I'Univers, ou Histoire de l'Eglise de la Création jusqu'à l'Apocalypse de St. Jean," Amsterdam, 1714 8th edition, Basnage represents the "wheels" precisely under the form of the meridians of a sphere. At first sight his engraved figure (p. 140) recalls the idea of the terrestrial sphere.

[^55]:    ${ }^{1}$ London: Folkard and Son, Devonshire Street. 1890.

[^56]:    ${ }^{1}$ This number agrees with the mass of the moon given by Bessel. I have always used it in my lectures on astronomy at the military school, but without according to it any peculiar importance, as the mass of the moon is not well known; how interesting, then, is it not to notice that having made use of it from che first, and without any preconceived idea, it has led me rigorously and without any correction a posteriori, to the surprising verification which we are about to see!

[^57]:    ${ }^{1}$ The present appendix was written in January, 1894, and our study of the Apocalypse at the end of 189 I , when we were completely ignorant of the meaning of the present chapter of Ezekiel.

    2 Observe that in the antechamber the southern face of the granite leaf passes through the centre of the granite stone; that is to say, the leaf, like the centre of the stone, marks 2000 upon the chronological scale. We have: southern face of the granite leaf $=2000^{\circ} 4$ and centre of the stone $=1999^{\circ} 825$.

[^58]:    ${ }^{1}$ If we admit that the construction ends in the middle of the second half of the stone, thus beginning and ending at equal distances from the centre, it would last 23 to 24 years; thus in like manner Herodotus assigns 20 years to the construction of the Pyramid, and the construction of the Temple and Royal House by Solomon has also taken 20 years.

[^59]:    ${ }^{1}$ Prof. Totten's learned and well-known chronology, for example, cannot be established in such a plain way; because it is not in accordance either with the immediate indications of the Bible or with the Pyramid.

[^60]:    1 "Our Inheritance," $5^{\text {th ed. .pp. 113, 114; look carefully at plate }}$ XV., which shows conspicuorsly the system of the four lines and of the three 6 -inch spaces exter ding from the ceiling to the door-top. At page 152 of this same isook, M. Piazzi Smyth thinks that the vertical lines or groovings on the south wall of the Antechamber, very close to 107.4 inches each, point out the number 108. If so, then the sum of the four fines points out, in its turn, the fatidical number 666 ; for this sum is equal to $4 \times 108=2 \times 216$, or twice $6 \times 6 \times 6$.

[^61]:    1 "Our Inheritance," 5th ed., p. 155 .

