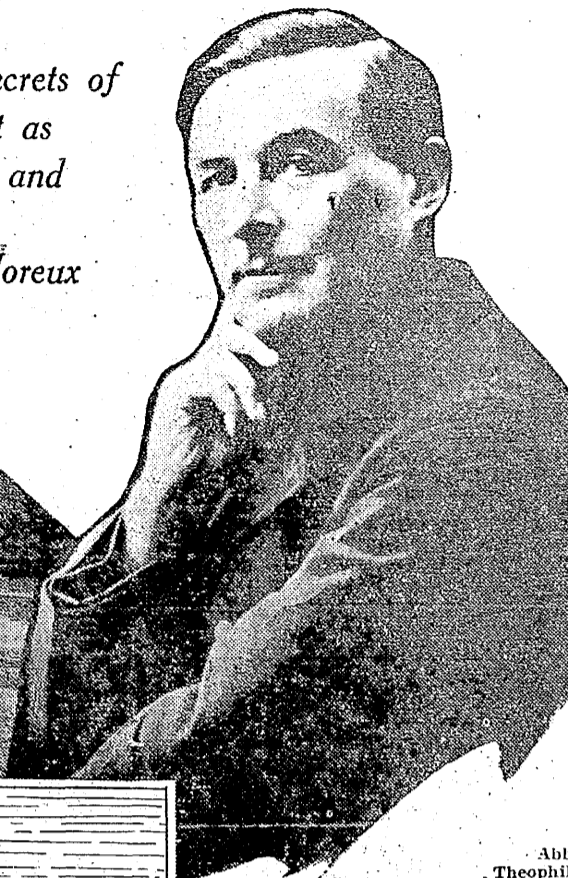
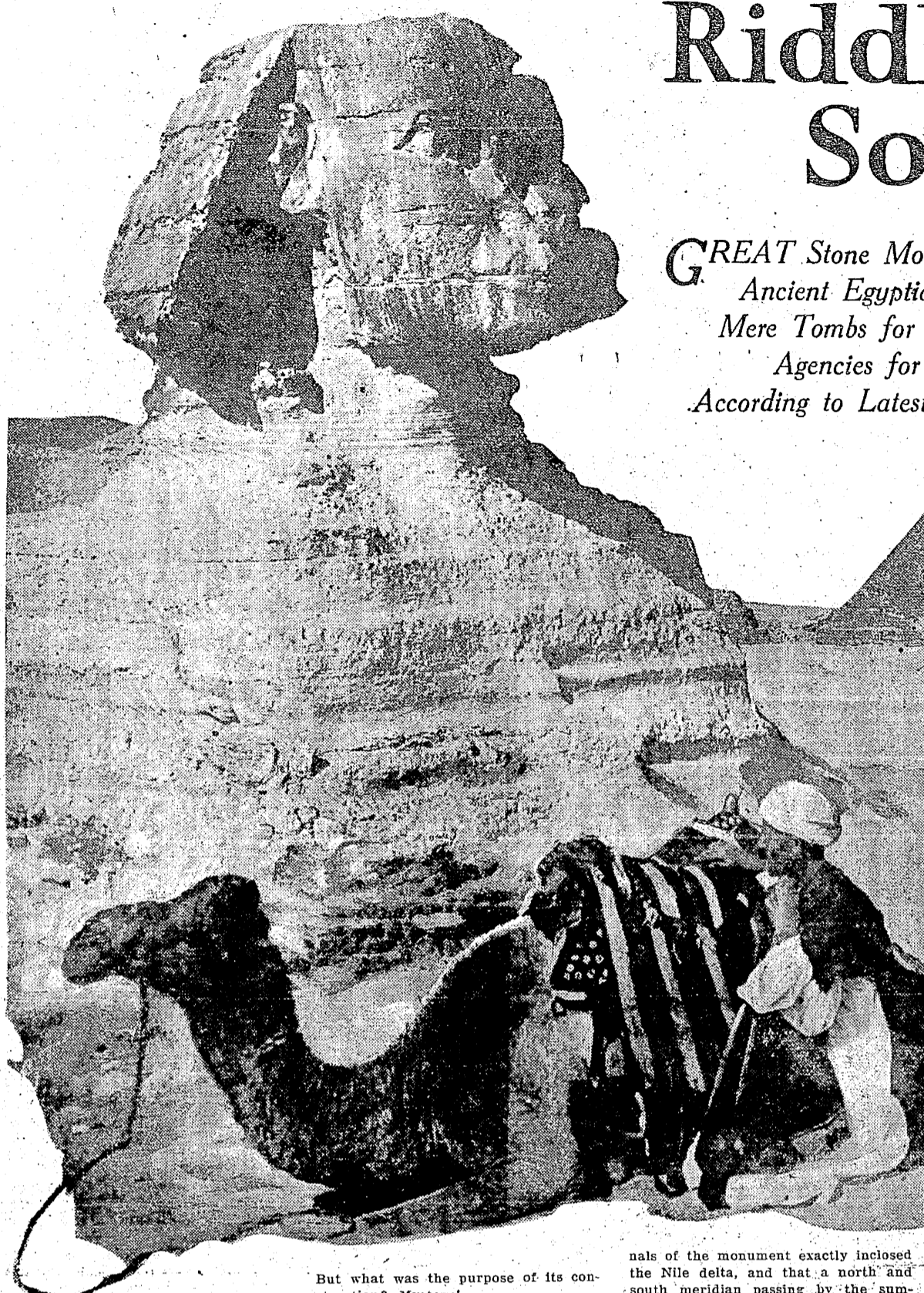


# Riddle of the Sphinx Solved at Last?

**G**REAT Stone Monster Stands Guard Over Ages-Old Secrets of Ancient Egyptian Priests Who Reared Pyramids Not as Mere Tombs for Pharaohs, but as Sundials, Calendars and Agencies for Other Valuable Scientific Formulas, According to Latest Deductions of the French Savant, Moreux



Abbe Theophile Moreux, noted French savant, whose study of the measurements of the Great Pyramid indicates that the Egyptian priests had a very thorough knowledge of astronomy, architecture and geometry.

By R. S. FENDRICK.

**W**AS the Great Pyramid of Egypt simply intended as a tomb for the Pharaohs? Or did the Egyptian priests of 2500 B. C., who formed

a sacred caste of scientists, construct this gigantic mass of stone in order to preserve permanently but secretly the mathematical and astronomical formulas they had discovered—a sort of sundial, calendar and bureau of national weights and measures?

And then, in a spirit of irony, did they build the Sphinx in front of it as a sardonic sentinel, mocking and defying the future ages to discover these secrets?

A great French savant, the Abbe Theophile Moreux, director of Bourges Observatory, author of several score of famous scientific works, and the most distinguished astronomer and mathematician in the Roman Catholic Church in France, has been carrying on and checking up the investigation into the mysteries of the great Cheops Pyramid that was started many years ago by Piazzi Smyth, the English scientist, and he has reached the conclusion that the second theory—that of the repository of scientific knowledge—is correct.

He has just published a fascinating account of his discoveries in a book called "The Mysterious Science of the Pharaohs," which has aroused tremendous interest in Europe.

"Have the pyramids of Egypt been constructed simply to serve as royal tombs?" Abbe Moreux asks skeptically in his preface. "If modern archeologists still affirm this, they will commit a more glaring error than the scientists of the year 5000 or 10,000 A. D. who, in unearthing the ruins and the crypts of our cathedrals, discover the tombs of our kings and our bishops, and conclude from this evidence that our marvelous monuments were erected to honor their remains.

"It is true that many of the pyramids did serve as sepulchers, but I am certain that this was not the principal reason why they were built. The greatest of them, that of Cheops, built under the fourth dynasty, or about 2,500 years before the Christian era, disproves the sepulcher theory. The stonework of this monument is extremely fine—so fine that it is almost impossible to put a knife blade between two of the gigantic stones—but there is hardly the slightest trace of the usual funeral inscriptions. It contains three chambers, fantastically called the chamber of the king, the chamber of the queen and the subterranean one, but there are no decorations or inscriptions in these rooms, as there would be if intended for tombs. In place of a sarcophagus, in the chamber of the king there is a sort of trough in stone that is marvelously cut. The Great Pyramid was therefore not a tomb.

But what was the purpose of its construction? Mystery!

"Did the Egyptian priests, these wonderful scientists of antiquity, wish to preserve in this imperishable monument the astronomical discoveries they had made and the scientific notions of their time? Why not!

"I have been laughed at and told that my imagination had unbalanced me, that the architects of the Great Pyramid were surely simple masons without education, and that my strange discoveries were only coincidences, but no one can explain to me how it happens that the sacred cubit, that was used for all the measurements of this unique monument, is exactly the ten-millionth part of the polar radius of the earth, a marvelous exact linear unit because of all the dimensions of the globe the polar radius is the only one that remains invariable for thousands of years.

"And how were the scientists of these ancient times able to know the form of the earth, to measure our planet and to weigh it; what means did they have at their disposition to study the secrets of the skies, and to discover the distance from the earth to the sun? But they apparently knew all of these things, for the measurements of the Great Pyramid prove it.

"In the face of these troubling facts, in front of the mathematical revelations of this unperishable monument, and before the indications the latter give us concerning the science of Egypt, we begin to understand the attitude of the monster Sphinx that stands guard over the secrets of the priests of antiquity.

"Are our incredulous scientists still going to talk of coincidences? Their doubt becomes more and more grotesque."

Before plunging into the mysterious numerical calculations of Cheops' pyramid, Abbe Moreux gives some of its measurements. The height is 5,775 English inches, base 9068.3 inches. The calculations were so accurate that there is only a mean error of six-tenths of an inch in length and twelve seconds in angle from a perfect square. It is understood that 100,000 workmen were called up at a time to work on the monument, each group remaining three months. As the work progressed inclined roads were built up to it, one of the roads taking ten years to finish. When the pyramid was finished the roads were removed, of course. The joining of the immense stones, which was done without mortar, was so perfect that it cannot be equaled today. It is still in perfect condition today, except that some of the face stones were pulled off during the Arab invasion of Egypt.

"The first revelations concerning the Great Pyramid were made at the end of the 18th Century," the learned French priest explains. "The scientific men who accompanied Bonaparte and his army were making a triangulation of Egypt when they discovered, to their astonishment, that the prolonged diagonals of the monument exactly inclosed the Nile delta, and that a north and south meridian passing by the summit divided the delta in two exactly equal parts. This is hardly due to hazard, and we must conclude that the architects were geometers of the first rank. The next discovery concerned its orientation. The architects apparently sought to have the four faces of the pyramids exactly facing the four cardinal points, but this was only achieved in the case of the Great Pyramid.

"It has always been a difficult problem even for the best architects. We have the compass today, but, as every one knows, the needle points to the magnetic pole, and there must be corrections for every locality and every year, for even every day. There is the astronomical method, using the Polar Star, but this is an unreliable method for many reasons, one being that we have a different polar star every few thousand years.

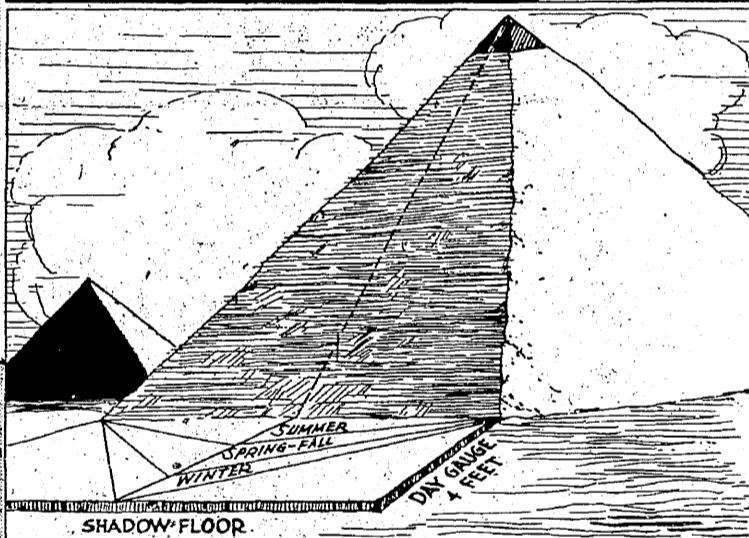
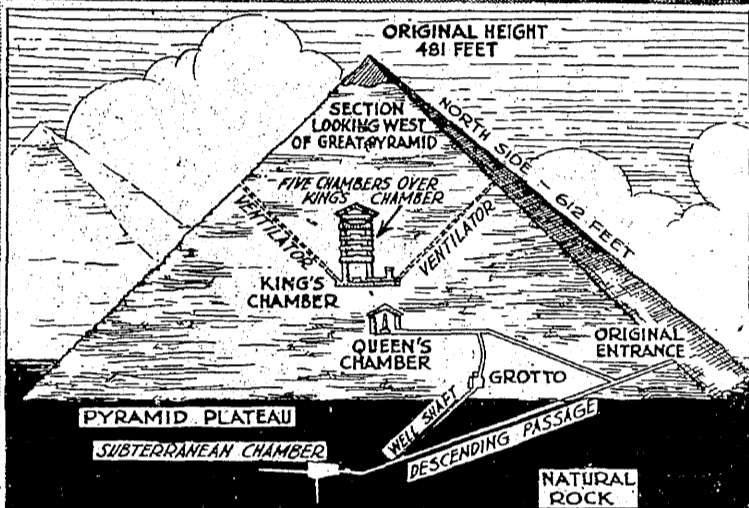
"We assume that the Egyptian priests who were the architects of this monument had none of the precise instruments in use today, but how astonished the astronomers were some years ago when they found that the Great Pyramid was oriented perfectly, except for a trifling error of 4 minutes, 35 seconds.

"Perhaps this was a coincidence also, for if the priests really had means for determining north and south, it was afterward lost, for the later pyramids are badly oriented, and even the ancient Greeks never discovered it."

Abbe Moreux declares that up to this point of his argument the knowledge indicated in the pyramids' construction could have been obtained right on the spot, but this is not true of many other curious revelations. He then explains how the scientists of the whole world sought the most practical meridian for many years and finally chose that of Greenwich, whereas the ideal one is that of the Great Pyramid. Is it not strange? The reason why the latter is the best is that it is the line that traverses the most continents and the least seas, and, stranger still, it divides into two equal parts the habitable lands of the earth.

Another curious fact is that the thirtieth degree of north latitude traverses more land than that of any other parallel, and the Great Pyramid is situated almost exactly on this parallel. Passing to the strange facts revealed by the measurements of the Great Pyramid, Abbe Moreux tells how all the mathematicians of antiquity, and even up to modern times, passionately sought "pi," or the formula of the relationship between the diameter and circumference of a circle, which is roughly 3.1416. But this formula is to be found imperishably preserved in the Great Pyramid. One has only to divide the perimeter, or the length of the four bases, by double the height. It works out exactly as 3.1416.

"So this monument is the material consecration of an important formula for which humanity has devoted unimagineable efforts," Abbe Moreux sums up. "How did the Egyptian priests discover it? Mystery.



Top diagram shows cross-section of the Great Pyramid, indicating location of various chambers, passageways and original height of the structure. The diagram just above shows how Moses B. Cotsworth, director of the International Fixed Calendar Year League, believes the Egyptians used this pyramid as a great sundial, by which they accurately determined the seasons.

"Furthermore, we know that this number plays a remarkable role in other ways. For example, the area of a cross-section of the pyramid is to the area of its base as 1 is to 3.1416."

Taking up the study of the Great Pyramid from the point of view of geodesy, Abbe Moreux relates the efforts of the human race to find a unit of measurement based on some unchanging dimension of the earth. The leaders of the French Revolution thought they had found a perfect unit in the meter, or 3.281 feet, which was supposed to be the ten-millionth part of the quarter of the earth's meridian, but some years later it was discovered to be two-tenths of a millimeter too short.

The unit of measurement of the Great Pyramid was the sacred cubit, or approximately 24.79 English inches.

Imagine how astonished Abbe Moreux and some of his predecessors were to remark that this unit was exactly one ten-millionth part of the polar radius, or the distance from the poles to the center of the earth! This polar radius is a dimension that never changes, and so a unit based on it is as perfect as can be found.

But how had the Egyptian priests, who probably never traveled, discovered the length of the polar radius? Mystery. Modern scientists only knew it a few years ago.

"To call all science to his aid, to devote centuries of hard and converging efforts, to improve ceaselessly our methods of observation, to perfect our technique, to carry on with perseverance the work of our predecessors, to push to an incredible point the precision of our calculations and then arrive at a discovery at least 4,000 years old, is it not the greatest deception that can torment the thought of a scientific man?" exclaims Abbe Moreux.

"And incredible as it seems, the result is right there under our eyes, so brutal and tangible that it must be accepted by everyone who does not purposely close his eyes to it."

Taking up the alleged secrets of the Great Pyramid that refer to the calendar, Abbe Moreux added the inches representing the lengths of the two diagonals of the base—there were twenty-five sacred inches in a sacred cubit—and had 25,800.

This is a significant figure, for every 25,800 years, the axis of the earth points in the same direction in the sky, and soon afterward slips off on a tangent.

The ancient peoples apparently did not know the exact length of a year, but Abbe Moreux multiplied the length of the ante-chamber, leading into the chamber of the king, by 3.1416 and had 365.242! Even the Greeks and the Romans did not possess this knowledge, but the Egyptian priests seem to have known it.

After extracting some complicated formulas relating to density, the French priest relates that he studied the strange trough in the chamber of the king, from which he discovered various measures used by the Egyptians.

"The effort to calculate the exact distance from the earth to the sun is the capital problem of modern astronomy," he declares.

It was only in 1900 A. D. that a circuit of eighteen observatories scattered all over the world made a concerted effort to calculate the distance and finally agreed on approximately 92,777,400 miles.

But in multiplying the height of the Great Pyramid by one billion, which is one of the key numbers of this monument, the result is practically the same!

"Therefore," Abbe Moreux points out, "during many centuries, while civilized nations were spending fabulous sums and scientific men were risking their lives to solve this most important astronomical problem, the solution was symbolized and monumentalized in the Great Pyramid since thousands of years.

"But the Egyptian astronomers do not seem to have stopped there. If we multiply the sacred Egyptian inch by one hundred million, we obtain the length of the swing made by the earth on its orbit in twenty-four hours, and this with a more precise approximation than we can secure with the yard or the meter.

"Furthermore, the passage into the pyramid was so placed that it formed a sort of telescope through which one could follow the Polar Star of that epoch at any hour of the day.

"In the face of these astonishing facts, how can anyone say that the Egyptians were ignorant of astronomy?"

Moses B. Cotsworth, director of the International Fixed Calendar Year League, suggests another use which the Egyptian priests made of the Great Pyramid, namely, as a giant sun dial by which they could measure the seasons of the year. Mr. Cotsworth thinks that the space on the north side of this pyramid was used as a dial or shadow floor. In order to carry out his tests satisfactorily, it will be necessary to repair this alleged shadow floor and to erect a model of the original apex on top of the pyramid. Permission to do this has been asked of the Egyptian government.

"It was the exact knowledge of the seasons acquired, as I believe, by the priests, with the aid of the pyramids, that first enabled the Egyptians to produce two crops each year instead of one.

"A delay of even a few days in sowing seed might mean a bad harvest, which would have endangered the national life and prosperity," declares Mr. Cotsworth.