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Pyramids and their Purpose

III. Pyramid Mysticism and Mystification

by Noel F. Wheeler

AFTER a consideration of the Pyramid of Khufu and of its original purpose, it will be instructive to take a glance at the vast hosts of the Pyramid Mystics, those who in one way or another extract prophecies from the various measurements of the same Pyramid and its passages. The literature on this subject is almost overwhelming and its value can safely be said to be in inverse ratio to its volume; but there are many whose knowledge of archaeology or of the Pyramid in particular is not sufficient to arm them against this pseudo-scientific obsession.

There have been in the past, and are still, many strange beliefs and cults current in the world, such as flat-earth-ism, the transmutation of Shakespeare into pork, and those excellent people who have bought land on the Mount of Olives in preparation for the Second Coming. They all have their followers, who naturally believe in them, and they are all impervious to common sense. But the Pyramid has attracted a much more formidable concourse than any other subject, largely because of the imaginary mystery of the monument, the remoteness of its date, and the learned formulae and pages of calculus (above the heads of at least 90 per cent. of readers—fortunately), which cloak the looseness of statements of fact by writers on the subject. Let us see where it all began.

From quite early times the fact that the Pyramid was oriented pretty closely to the cardinal points was noticed, as was the roughly pole-star direction of the Descending Passage orifice, and these facts probably led some to think of finding further mathematical peculiarities. Herschel, the astronomer, wrote much in 1860 on these lines in the *Athenaeum*, and John Taylor, the father of the Pyramid mystics, wrote similarly (in 1859) under the title 'The Great Pyramid, why was it built and who built it'? But the greatest fillip was given to the movement by Prof. C. Piazzi Smyth, then Astronomer Royal for Scotland, who at Taylor's request made a scientific examination of the pyramid during the winter of 1864–5. He wrote 'Life and Work at the

Great Pyramid ', in which he started the ' pyramid inch ' myth and many others ; and everything which has appeared in print on the subject since is founded on Piazzi Smyth's deductions.

Sir Flinders Petrie came out in 1881 and made his survey of the Pyramid, and his actual figures agree for the most part with those of Smyth, but he gave it as his opinion that there was nothing in the theories. John and Morton Edgar in 1909 were on the track of theories ; they measured the Pyramid in great detail and made a number of valuable plans, but went well astray in ' Great Pyramid Passages, etc.', which in its later dress is ' The Great Pyramid, its spiritual symbolism ' (1924). In this latter publication are many misstatements of fact, many false deductions, false calculations, and wonderful theories. There are hosts beyond number of minor publications, either specifically on the Great Pyramid, or bringing it and its ' prophecies ' in ; and there is no point in noticing them since they do but repeat what Piazzi Smyth, Edgar, and Davidson have said more cleverly. Davidson's book, ' The Great Pyramid, its Divine Message ' (1927), is the precocious child of all this family and contains many hair-raising formulae and geometrical figures, all founded on the same sand as the rest.

That this farrago of nonsense should be read at all is remarkable, but that it should be believed, as it is, by large numbers of otherwise normal people is in itself a miracle. Let us take some of the points from the works of Edgar and of Davidson and see what they amount to.

Dimensions, Proportions, Etc.

(A) The value of π (3.14159). It is claimed that the Egyptians of the Pyramid Age knew and used this proportion in many places in the Pyramid of Khufu, that the base-perimeter to height proportion is double this.

The base-perimeter to height proportion, as can be seen from the table of ell measures in a previous article, is double 22/7 (3.14286) ; and the Rhind papyrus gives the estimation of π for the Middle Kingdom as 3.16049. So that a knowledge, in the Pyramid Age, of the true value of the 22/7 approximation is unlikely. Incidentally, the pyramids of Seneferu, and Henutsen have the same proportion ; while those of Khafré, Khafré's Queen, Menkauré, Sahure, Nefer-ir-ka-re and Ne-user-re differ but slightly from it.

In the maze of the π theories we find a statement by Edgar that the sum of the length and breadth of the sarcophagus equals the height multiplied by π. It does not.

(B) Mathematical miracles. Edgar states that the area of a certain triangle is exactly 20 times the horizontal length of the Grand Gallery. How 20 times a length can equal an area we do not know. Also Edgar

> 'The fact that there are 5 masonry courses in the King's Chamber walls, and that the topmost contains 7 stones, suggests the number 5.7. . . .'

This requires no comment, and the following is similar :—

> 'The total weight of every substance in the earth is, therefore, the mean weight of every substance. This mean, or average, weight is the standard for reference. Each individual substance, taken by itself, has a weight which is proportionate to the mean weight. This proportion is known by the term " Specific Gravity " ' (! !).

(C) Levels. Much is made by Edgar and Davidson of levels throughout the Pyramid, sometimes given to hundredths of an inch. An idea of the accuracy to be expected from the builders is got from a series of levels taken along the north face of the platform by the present writer in the course of the survey of the royal cemeteries. Levels were taken at intervals of $\frac{1}{8}$ base, *i.e.* at 9 equidistant points including the NE and NW corners (points 1 and 9 respectively). The results were interesting and gave the following differences from the mean value :—

Point 1	— 0.002m	4	— 0.007m	7	— 0.007m
2	+ 0.021m	5	0.000	8	— 0.020m
3	+ 0.006m	6	+ 0.009m	9	+ 0.005m

From this it appears that the builders started with the centre of the Pyramid side levelled, worked from this to the NE and NW corners, then from these corners to the mid-points between them and the centre, and finally from each of the 5 points above to the adjacent $\frac{1}{8}$-length point outwards from the centre. The errors have a maximum value of about 2 cms., and an average of 1 cm. ; it is foolishness to calculate levels based on these to greater accuracy.

(D) Proportions. Much is made also of the proportions of the Great Pyramid and its chambers, the sarcophagus, etc. That these are what were common in the Pyramid Age can be seen from the following table of the proportions of length, breadth and height, for a length of 1 :—

Structures	Length	Breadth	Height
Pyramid itself	1	1	.641
4th Dyn. mastaba IIIs (Junker) ..	1	.481	.167
IIIn ,, ..	1	.432	.182
IVn ,, ..	1	.432	.182
IVs ,, ..	1	.4	.182
Vn ,, ..	1	.404	.17
Vs ,, ..	1	.432	.182
VIn ,, ..	1	.417	.167
VIs ,, ..	1	.455	.182

	Length	Breadth	Height	
CHAMBERS				
King's Chamber	1	.5	.56	
Queen's Chamber (full height)	1	.911	1.073	
(side height)	1	.911	.81	
Average of 13 burial chambers in 4th Dyn. mastabas (Junker)	1	.986	.796	
Main hall of Uah-ka's tomb at Qau (Middle Kingdom)	1	.598	.379 & .319	
Burial chambers in above tomb	1	.936	?	(two chambers
	1	.873	?	of the many)
SARCOPHAGI				
Khufu	1	.43	.46	(excl. lid)
Khafre	1	.534	.447	(incl. lid)
Hetep-heres (Khufu's mother)	1	.476	.447	(,,)
Meresankh II (Khufu's dtr.)	1	.426	.38	(excl. lid)
Hor-dedef (Khufu's son)	1	?	.34	(,,)
Fefi, 4th Dyn. (S. Hasan's 'Giza')	1	.454	.391	(,,)
From VIIn (Junker) 4th Dyn.	1	.394	.34	(incl. lid)
	1	.394	.32	(excl. lid)
From D100 (Junker) 4th Dyn.	1	?	.287	(,,)
	1	?	.335	(,,)
Cairo Museum, no. 27, 4th Dyn.	1	.517	.63	(,,)
29, ,,	1	?	.598	(,,)
Cairo Museum, no. 31, 4th Dyn.	1	.45	.522	(,,)
33, ,,	1	?	.571	
11th Dyn. Sarcophagus of Sebekhetep at Qua	1	.392	.392	(excl. lid)
	1	.392	.498	(incl. lid)
11th Dyn. Sarcophagus of Wah-ka I at Qau	1	.4	.398	(excl. lid)
11th Dyn. Sarcophagus of Wah-ka II at Qau	1	.394	?	
Late Sarcophagus of Pabasa (600 B.C.)	1	?	.288	

ANGLES		
Elevation of Ascending Passage, Khufu	26½°	
Descending Passage, 3rd Pyr.	26°	
,, ,, Khufu Queen	26½°	
,, ,, 3rd Pyr. Khufu Queen	27°	
Plug Passage, Wah-ka II, Qau	32½°	(11th Dyn.)
Descending Passage in Qau tombs	30°	(,, ,,)
	32°	(,, ,,)
	32½°	(,, ,,)
VARIOUS	35°	
Length of one plug-block, Khufu	2 ells, 6 hands, 1 finger	
,, ,, ,, Wah-ka II (Qau, 11th Dyn.)	2 ells, 4 hands, 2 fingers	

From the table (pp. 294-5) it is clear that proportions are very much the same in a number of cases, even from different periods. Compare particularly : (*a*) King's Chamber and Cairo Museum sarcophagi of 4th Dyn. ; (*b*) Queen's Chamber and Junker's mastaba burial chambers of 4th Dyn. ; (*c*) sarcophagi of Khufu, his son Khafré, his mother Hetep-heres, his daughter Meresankh II and others ; (*d*) passage angles ; and (*e*) plug-block lengths.

(E) Unit of measurement. The invention of the ' Pyramid Inch ', .999 inches, by Piazzi Smyth was a masterpiece. It was assumed by him to be the unit of measure simply because its assumption made certain measurements fit in with astronomical and other numbers ! The method of making these figures fit exactly is also a masterpiece. If the Egyptians made a passage, as they did, slightly wider in one place than another—inevitable from the nature of their tools and instruments —then a measure between these limits is assumed to suit what is required ; for instance, if the limits happen to be 3 inches and $3\frac{1}{2}$ inches, then the assumed ' intended ' measurement would be taken as 3.14159 and much marvel evoked because it equals the value of π. Another popular method is to add the required amount to a measurement to bring it to what is wanted, and call this addition a ' special number ' of the Pyramid or of the chamber in question ! In this way, in various parts of his book, Edgar has 10, 8, 7, 5, 3, 36 as ' special numbers ' as convenient ; and multiplies gaily by 100, 1000, and larger numbers as though it signified nothing.

Geographical and Orientation

Edgar states :—

> ' . . . there is more land surface in both its (the Pyramid's) meridian and its latitude than in any other meridian and latitude ; while its nether meridian . . . ranges its whole length through water except for a short distance near Behring's frozen straits. For this reason, Professor C. Piazzi Smyth claimed that the meridian of the Great Pyramid is by far the most suitable zero of longitude for all nations '.

The meridians of 22°, 28° and 105° east, and the latitude of 45° north, all have a longer reach over land, and there are probably many others. The ' short distance near Behring's frozen straits ' is merely a distance of some 800 miles through the middle of Alaska !

Another point made much of by Edgar, and repeated by Davidson, is that the true bearing of Bethlehem from the Pyramid is the complement of 26° 18′ 10″, which latter is the assumed ' intended ' angle of slope of the Pyramid passages between the figures for the actual slopes

of different passages. Edgar calls this the course by Mercator sailing. Why the modern invention of Mercator's projection should be used for a land journey is not clear, especially as Edgar also calls this the shortest distance, which it is not,—and a straight line, which it also is not. If he wanted the shortest distance he should have used the Great Circle course, which would have given him quite a different distance and quite a different ' course ', in fact the latter would have changed progressively throughout the trip. If this bearing had not ' hit off ' Bethlehem, one can imagine that it might have met some equally significant site, since that part of the world is full of them. Incidentally Edgar talks of the ' parallel of longitude ' of the city of Bethlehem : it must be the only spot that has one. He also refers, in another place, to the capacity of the King's Chamber being so many Pyramid inches, but gets nearer in the next sentence by calling them ' cubical inches '.

On the subject of Orientation Edgar considers that

> ' no builder could ever orient the sides of a monument with the aid of the magnetic compass ; for the magnetic north is many degrees away from the true north. To accurately lay the four sides of the Great Pyramid due north, south, east and west, as they were originally, necessitated either the knowledge of exact scientific astronomy, or the knowledge that can be communicated by Divine Inspiration '.

For the first, if the ancient builder is meant, then he had no magnetic compass anyway ; if the modern builder—he can surely calculate the variation. For the second, the variation at present in Egypt is very small, certainly not ' many degrees '. For the third point, it was only necessary to know the Pole Star, which the Egyptians did know quite well. We have excavated and surveyed some hundreds of Old Kingdom mastaba tombs at Giza, the majority of which are oriented similarly to the Great Pyramid ; also tombs and buildings elsewhere with the same direction. A Middle Kingdom palace in the Sudan was found to be oriented as exactly north, south, east and west, as any but astronomical instruments could show ; and for accuracy of plan this last had half the error per cent. in its diagonals which the Great Pyramid has in its base sides ! It was the Egyptian practice to orient their tombs and temples thus as a general rule, though the lie of the land and other considerations caused them to modify it in many cases : frequently ' up-river ' or ' down-river ' was used as north and south irrespective of the direction in which the stream lay. The object of interest in all these examples belonging to the Pyramid Age was not the north but the east, towards which the temple or chapel faced.

Construction

Writing of the emplacement for the bridge-slab in the Grand Gallery, Edgar says :—

> ' Some think that originally there was no break in the continuity of the Grand Gallery floor, and that thus the entrance into the Queen's Chamber was concealed. But it is more probable that the gap was constructed in order to give the appearance of having been forced. There are certain features which indicate this '.

There are no such features, and the purpose of the gap is obvious at first glance. He also writes :—

> ' In none of the passages and chambers of the Great Pyramid have we found any of the sculpture-work and carved hieroglyphics which are so common in many of the smaller pyramids . . .'

There is not a single 4th Dynasty pyramid which is inscribed : the idea of the Pyramid Texts did not begin till the 5th Dynasty.

Herodotus actually states that ' on the Pyramid is shown an inscription, in Egyptian characters, how much was expended in radishes, onions and garlic, for the workmen ; which the interpreter, as I well remember, reading the inscription, told me amounted to 1600 talents of silver '. He had obviously been into either the funerary temple of the Pyramid, or more probably into one of the many mastaba chapels. And this is the man quoted as an authority on Egyptian matters by the ignorant ! Herodotus lived longer after the Pyramid Age than we are today after him.

Davidson found material for many pages of theories in an assumption that the ' hollowed in ' core masonry, by which each Pyramid-face of core is ' concave ' to the extent of some three feet in the centre, was repeated in the outer casing. This is known not to be the case. The hollowing-in of the core was most probably a similar measure to the inward sloping bed cut in the rock for the lowest course of casing found in a number of small 4th Dynasty pyramids—intended to give rigidity and stability to the structure. The overlapping of the Grand Gallery courses, the sextuplication of the King's Chamber roof, the massive blocks over the Pyramid entrance, etc., are all examples of the same kind of thing. The same writer, as an engineer, has the following remarks about the plug-blocks :—

> ' Any engineer, architect, or constructional operative knows that it is impossible to slide or push a block of stone, however smoothly dressed and accurately squared, along a passage after the passage has been completely constructed, if the block fits the passage tightly. It is a matter of experience, in such circumstances, that the block will jamb in the passage unless it has at least $\frac{3}{4}$ of an inch of clearance all round '.

It is equally a matter of experience, constructional operatives notwithstanding, that Egypt is full of examples of the Egyptians having done just this very thing.

Edgar states that the sarcophagus must have been put into the King's Chamber before the roof was on, because the entrance to the chamber is too small to admit the sarcophagus. The height of the latter, according to Edgar, is 41.27 inches (max.); and the width 38.72 inches (max.); the height of the entrance passage is 42.5 inches and the width 43 inches, according to Davidson's plans. This is almost as bad as the builders of the tomb of Meresankh, grand-daughter of Khufu, who cut the doorway in the rock wide so as to admit the sarcophagus and then built it in to the normal width with masonry; the joke being that by turning the sarcophagus on its side we removed it through the masonry doorway easily. It was quite usual, on the other hand, for the Egyptians to put in a sarcophagus larger than the doorway before the masonry was closed in, and in the Pyramid they must have done this at least before the Grand Gallery roof was closed, since the sarcophagus could not have negotiated the turn from the descending to the ascending passage.

Davidson says that it is not possible to reach the north–south central plane of the Pyramid except in the King's Chamber, when in fact one can also do so in the rock-cut chamber. On such wild statements are the wilder theories of these writers founded. Davidson also discourses much on the subject of Stonehenge, finding many wonderful things in its measurements; but he states that the area of the circle which is 'precisely internal' to the outer ring of stones is 'exactly' equal to $\frac{1}{4}$ of the ancient Egyptian aroura. The aroura contains from 29555 to 29427 square feet, according to whether one uses the cubit value of 20.63 inches or 20.59 inches; and Davidson gives the Stonehenge area as $\frac{1}{4}$ of 29514.3 square feet. However, when we get the area of the Stonehenge circle from the Office of Works plan in ANTIQUITY we find that it is $\frac{1}{4}$ of 30329.9 square feet, which is not quite the same thing.* The diameter of the Stonehenge circle on the Survey plan is 1179 inches, and according to Davidson's plan 1163 inches, which is not 'exactly' the same.

ARCHAEOLOGICAL

Edgar tells us that Cheops was named Khufu by modern archaeologists. This should read that Khufu was called Cheops by the Greeks,

* See ANTIQUITY, v. I, 39, 42; II, 235; IV, 143, 340.

who knew no better. There is some excuse for confusion in names, since eminent archaeologists still persist in many versions of every ancient Egyptian name (see Reisner's on the 3rd Pyramid in *Mycerinus*). Mykerinos was as near as the ancient Greeks could get to Menkauré, but his name was Menkauré for all that.

Edgar also, after telling us that the Pyramid of Khufu was not intended as a tomb and that Khufu was really buried in what is well known to be a tomb of two or three thousand years later date, writes :—

> ' Cheops . . . therefore, did not intend the Great Pyramid to serve as a tomb ; nor, indeed, if we are to believe the reasonable deductions which are based upon historical accounts, did he or his Egyptian subjects know what purpose this immense edifice was intended to serve ' !

We can picture Khufu and his officials meeting with furrowed brows, and the King saying to them ' What on earth am I building this thing for ' ?

Davidson insists on calling the name of the Pyramid of Khufu ' Khuti '—' The Lights '. The name is ' Khufu Akhet ', meaning ' The (eastern) horizon of Khufu ', the significance of which will be found by referring to the Pyramid Texts. The name might less probably mean ' Khufu is glorious ' or ' The Glory of Khufu ', but in any case the name of Khufu is inseparable from ' Akhet ' in the name of his Pyramid. The 2nd Pyramid was ' Khafre Wer ', ' Great is Khafre ' ; and the 3rd Pyramid similarly ' Menkauré Netery ', ' Menkauré is Divine '.

One thing found continually in works like these (Edgar and Davidson), is that obsolete or unacknowledged authorities are very frequently quoted. Fallacies are thus introduced to the readers, apparently with authoritative backing, but actually with none worth speaking of.

Davidson, for instance, quoting Mr Marsham Adams' ' The Book of the Master ', claims to find references to the Great Pyramid in the Egyptian ' Book of the Dead '. He speaks of the ' final chapter ' referring to the King's Chamber, but if he means chapter 190 or any of those immediately preceding it there is no such reference ; in quoting from this ' final chapter ' he is quoting from chapter 161, in which one finds nothing which by the wildest stretch of the imagination could refer to the Pyramid. Incidentally the oldest versions of these papyri are of the New Kingdom, and the only version of the origins of the ' Book of the Dead ' which can be quoted with regard to the Pyramid are the Pyramid Texts of the 5th Dynasty. The Pyramid

Texts are quoted by Davidson in one place thus :—' Unas standeth up and is Horus ; Unas sitteth down and is Set ', when the text actually has ' Horus says " Stand up, Unas "; Set says " Sit down, Unas "' (Pyr. 473). The authority given by Davidson for this and many other archaeological and philological questions is not one that would be accepted as of much value today.

In the matter of dates, Edgar arrives at 2 B.C. for the birth of Jesus ; while Davidson gives 4 B.C.

Miscellaneous

Edgar writes of the ' shining white ' Pyramid ; and Davidson goes on to work out a marvellous theory that the sun's reflections and shadows from the Pyramid of Khufu were intended to mark the seasons ! This is accompanied by numerous plates and diagrams.

Granted first of all that the Egyptians did not know their own seasons well enough without a heliograph message to tell them when to plough, sow and reap, one is still up against the question of how it was done. The fine white limestone of Turrah, which was used for the Pyramid casing—as for the casings of all the best of the Giza mastaba tombs—does not take a fine enough polish to reflect anything very thrilling. It is only nearly white when freshly quarried, and rapidly tones down to a sand colour when exposed to air and sun. Granite or alabaster would have been much more suitable materials for a mirror. We are given as reasons for this the accuracy of the working and jointing of the casing, the fact that flaws on the stone were ' patched ' carefully with limestone insets, and the Pyramid's name ' The Lights '. The concavity of the casing face is also mentioned in this connexion.

The accuracy of the working is equally good in those parts of the Pyramid which could not reflect the sun—the internal passage-system for instance—and the same accuracy is found in other contemporary tombs, such as the casing of Khufu's 2nd Queen's Pyramid. The ' patching ' of flaws was a usual Egyptian practice and is found in most of the Giza mastaba tombs and pyramids ; the Pyramid's name was not ' the Lights ', as explained above ; the casing-face was not concave, as also previously explained.

There is a good deal in these publications about the Pole Star direction of the Descending Passage, and we have an enlightening statement on the subject in ' What saith the Scripture ' ? by Disciplus —

> ' . . . by the direction in which the entrance passage points to the heavens, as only in this year 2170 B.C. did the Pole Star shine exactly down the passage '.

followed on the next page by :—

> ' Anyone accustomed to use a theodolite for taking angles knows how small an accidental displacement may seriously affect the results. This is particularly the case with measurements respecting the apparent position in the heavens of the Pole Star, its movements being so slight, that a thousand years make no very appreciable difference, and its change in even five centuries is probably not measurable '.

And yet these people arrive at the precise date of 2170 B.C. by the Pole Star alignment, and scorn the archaeologists' date of 3500 to 3000 ! Incidentally the field of view from the bottom of the Descending Passage includes practically *one degree* of the sky, vertically and horizontally.

Davidson writes on freemasonry from his ' technical knowledge of the symbols displayed by the Fraternity ', and professes to find their ' repeated application in the design of the Great Pyramid ' and suspects from this ' that the elements of the Order were formulated at a time when all knowledge of that Truth, subsequently to be enshrined in the structure of the Great Pyramid, had not yet been lost '. We know that two symbols used by the U.S.S.R. today are the hammer and sickle ; we also know that both occur in the hieroglyphics ; but we do not therefore infer that Bolshevism was known in the Pyramid Age. Speaking also from our ' technical knowledge of the symbols displayed ', etc., we can say that where objects used today as symbols are depicted in ancient Egypt, they have nothing but their obvious and operative significance. There is no evidence whatever to the contrary.

Since our personal opinion, unsupported, of the Pyramid mystics may not be worth much, let us see what some others have said.

Petrie, *Seventy Years in Archaeology* :—

> ' The fantastic theories, however, are still poured out, and the theorists still assert that the facts correspond to their requirements. It is useless to state the real truth of the matter, as it has no effect on those who are subject to this type of hallucination. They can but be left with the flat-earth believers and other such people to whom a theory is dearer than a fact '.

In *Ancient Egypt*, part II, 1930, he also writes :—

> ' It need hardly be said to our readers that the extraordinary fallacies and misstatements about the Great Pyramid are lamentable nonsense. The prophetic theories which the writers elaborate are the substitutes for others of the past 60 years, always foretelling a few years ahead, and when disproved by events then shifted to new dates. A prophecy concerning 50 years hence would be safer but not so sensational '.

Borchardt's opinion will be found in that excellent publication of his, 'Gegen die Zahlenmystik an der grossen Pyramide bei Gise' (Berlin, 1922), which contains the clearest refutation of these mathematical delusions.

Budge, *The Mummy* (1925) :—

> 'According to some distinguished thinkers the arrangement of the chambers, the lengths and angles of the inclination of the corridors, etc. represented mysteries the knowledge of which was of the highest importance to the human race, and every measurement had its esoteric meaning and symbolism. The present writer is convinced that the Great Pyramid was built not to serve as an astronomical instrument or as a standard of measurements for the world, but as a *tomb* and as nothing but a tomb'.

He also wrote in *The Nile* (1902) :—

> 'It is well to state at once that the Pyramids were tombs and nothing else. There is no evidence whatever to show that they were built for purposes of astronomical observations, and the theory that the Great Pyramid was built to serve as a standard of measurement is ingenious but worthless'.

Arthur Weigall, *Ancient Egypt* (1928) :—

> 'It may be mentioned in passing that the modern theories attributing prophetic significance to the measurements and arrangements of the inner passages of the Great Pyramid are quite fantastic, and do not receive the support of Egyptologists'.

Reisner, *Mycerinus* (1931) :—

> 'Of quite a different character was the interest excited by the supposed mysteries of the pyramids in the group of writers led by Piazzi Smyth, whose disquisitions have never had any archaeological value and need no further mention'.

Finally, Arthur Mee, who is not an archaeologist, in his *Wonderful Year* has given us about the best statement of the position :—

> '"The People Who Will Believe Anything" :—There are people rich beyond their dreams, but how many people there are who are rich beyond their brains! It is pitiful to think that for every knave there is a fool, that every rogue can find a hundred simpletons to play on' . . .

There is really no particular reason why these mystics should have chosen or limited themselves to the Pyramid of Khufu. Borchardt, in the publication previously referred to, makes them a present of the fact that in the pyramid of Sahure's Queen at Abusir the proportion of half the base perimeter to the height is equal to Napier's logarithmic

base ' e ' (2.71828). We might go further and suggest that if the Crystal Palace were substituted for Khufu's Pyramid an enormous increase in the possible number of measurements would be found, and undoubtedly a great many of them would yield the exact values of a number of things. If a suitable unit of measurement is found—say versts, hanks or cables—an exact equivalent of the distance to Timbuctu is certain to be found in the roof girder work, or in the number of street lamps in Bond Street, the Specific Gravity of mud, or the mean weight of an adult goldfish.

To those who are familiar with Wilde's ' Portrait of Mr W. H.' that tale will present a good parallel to the mentality which has invented and maintained these astounding theories. It has been customary in some circles to dub them ' Pyramid-ites ', but after all ' Smyrniot ' and ' Cypriot ' are used for ' those of Smyrna ' and ' those of Cyprus ', so why not Pyramidiot ?