

**THE SOLUTION OF THE PYRAMID  
PROBLEM; OR, PYRAMID  
DISCOVERIES, WITH A NEW  
THEORY AS TO THEIR ANCIENT  
USE**

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The Solution of the Pyramid Problem; Or, Pyramid Discoveries, with a New Theory as to Their Ancient Use by Robert Ballard

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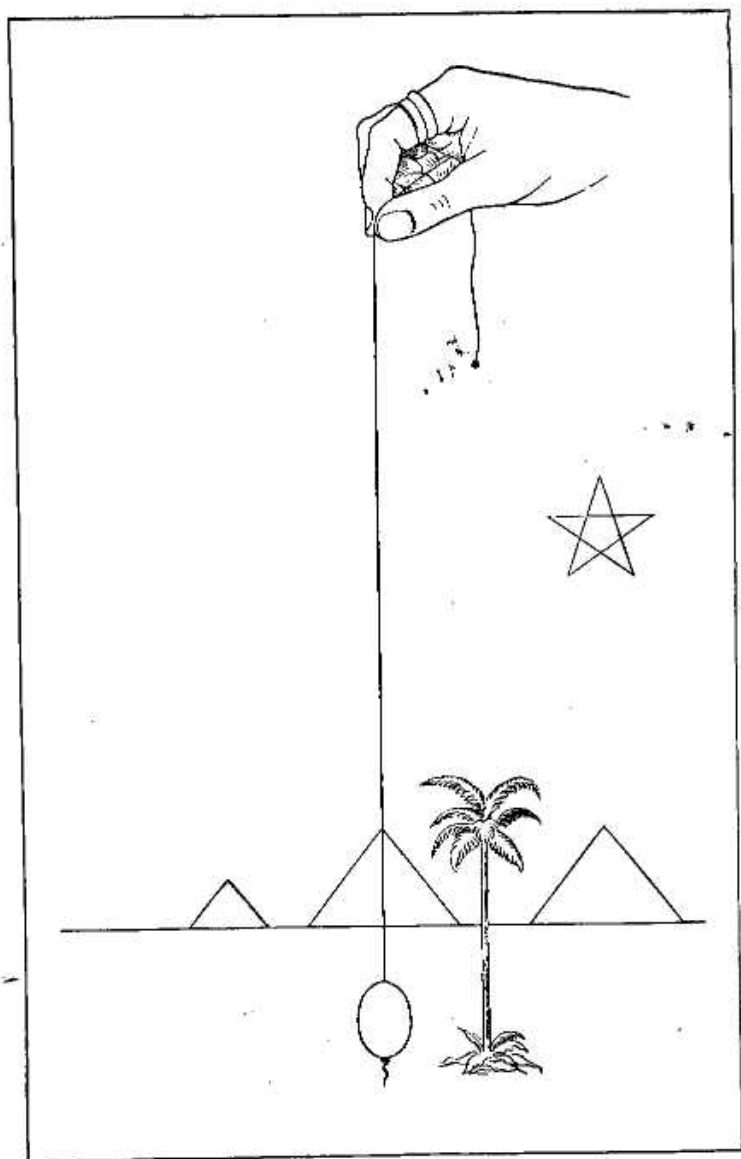
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**ROBERT BALLARD**

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THE SOLUTION  
OF THE  
PYRAMID PROBLEM

OR,  
PYRAMID DISCOVERIES.

WITH A  
NEW THEORY AS TO THEIR ANCIENT USE.

BY  
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## CONTENTS.

	PAGE
§1. The Ground Plan of the Gizeh Group.....	9
Plan Ratios connected into Natural Numbers.....	13
§2. The Original Cubit Measure of the Gizeh Group.....	15
§3. The Exact Measure of the Bases of the Pyramids.....	19
§4. The Slopes, Ratios and Angles of the Three Principal Pyramids of the Gizeh Group.....	20
§5. The Exact Dimensions of the Pyramids.....	23
§6. Geometrical Peculiarities of the Pyramids.....	28
§6A. The Casing Stones of the Pyramids.....	32
§7. Peculiarities of the Triangles 3, 4, 5 and 20, 21, 29.....	35
§8. General Observations.....	38
§9. The Pyramids of Egypt the Theodolites of the Egyptian Land Surveyors.....	41
§10. How the Pyramids were made use of.....	44
§11. Description of the ancient Portable Survey Instrument..	51
Table to explain Figure 60.....	64
§12. Primary Triangles and their Satellites;—or the Ancient System of Right-angled Trigonometry unfolded by a Study of the Plan of the Pyramids of Gizeh.....	65
Table of some "Primary Triangles" and their Satellites.	74
§13. The Size and Shape of the Pyramids indicated by the Plan.....	77
§14. A Simple Instrument for laying off "Primary Triangles"	79
§14A. General Observations.....	80
§15. Primary Triangulation.....	82
§16. The Pentangle or Five-pointed Star the Geometric Sym- bol of the Great Pyramid.....	91
Table shewing the comparative Measures of Lines ...	96
§17. The manner in which the Slope Ratios of the Pyramids were arrived at.....	104





LIST OF WORKS CONSULTED.

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- Penny Cyclopædia.* (Knight, London. 1833.)  
*Sharpe's Egypt.*  
"Our Inheritance in the Great Pyramid." *Piazzi Smyth.*  
"The Pyramids of Egypt." *R. A. Proctor.* (Article in *Gentleman's Magazine.* Feb. 1880.)  
"Traite de la Grandeur et de la Figure de la Terre." *Cassini.* (Amsterdam. 1723.)  
"Pyramid Facts and Fancies." *J. Bonwick.*

