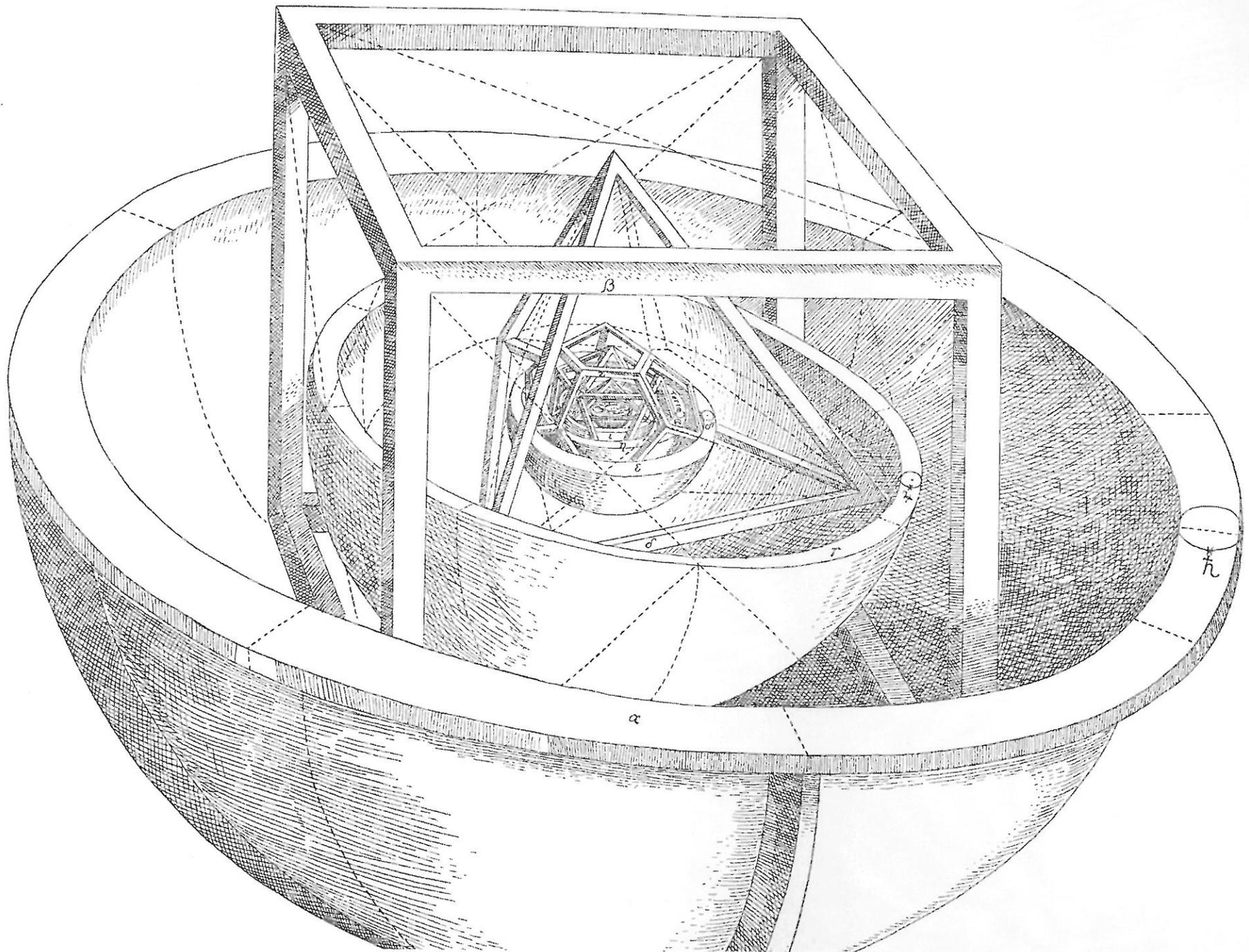


5.2. Kepler's nested polygons and planetary spheres (redrawn for greater clarity in the central portion), from the *Mysterium cosmographicum*.

Table 5.1 *Relative sizes of the adjacent planetary orbits (assuming the innermost part of the outer orbit to be 1000)*

Planet	Intervening regular solid	Computed by Kepler	From Copernicus
Saturn	Cube	577	635
Jupiter	Tetrahedron	333	333
Mars	Dodecahedron	795	757
Earth	Icosahedron	795	794
Venus	Octahedron	707	723
Mercury			

TABELLA III.
ORBIVM PLANETARYVM DIMENSIONES, ET DISTANTIAS PER QVINQVE REGVLARIA CORPORA GEOMETRICA EXHIBENS.



Ioannis Keppleri
HARMONICES
MUNDI

LIBRI V. QVORVM

Primus GEOMETRICVS, De Figurarum Regularium, quæ Proportiones Harmonicas constituunt, ortu & demonstrationibus.

Secundus ARCHITECTONICVS; seu ex GEOMETRIA FIGVRATA, De Figurarum Regularium Congruentia in plano vel solido:

Tertius propriè HARMONICVS, De Proportionum Harmonicarum ortu ex Figuris; deque Naturâ & Differentiis rerum ad cantum pertinentium, contra Veteres:

Quartus METAPHYSICVS, PSYCHOLOGICVS & ASTROLOGICVS, De Harmoniarum mentali Essentiâ earumque generibus in Mundo; præsertim de Harmonia radiorum, ex corporibus cœlestibus in Terram descendentibus, eiusque effectu in Natura seu Anima sublunari & Humana:

Quintus ASTRONOMICVS & METAPHYSICVS, De Harmoniis absolutissimis motuum cœlestium, ortuque Eccentricitatum ex proportionibus Harmonicis.

Appendix habet comparationem huius Operis cum Harmonices Cl. Ptolemæi libro II I. cumque Roberti de Fluctibus, dicti Flud. Medici Oxoniensis speculationibus Harmonicis, operi de Macrocosmo & Microcosmo insertis.



Cum S. C. M^{te}. Privilegio ad annos XV.

Lincii Austriae,

Sumptibus GODOFREDI TAMPACHII Bibl. Francof.
Excudebat IOANNES PLANCVS.

ANNO M. DC. XIX.

KEPLER'S THIRD "LAW"

FROM KEPLER'S DATA

	Period (years) -----	Mean Distance -----	Period Squared -----	Distance Cubed -----
Mercury	0.2408	0.3881	0.0580	0.0585
Venus	0.6152	0.7241	0.3785	0.3797
Earth	1.0000	1.0000	1.0000	1.0000
Mars	1.8808	1.5235	3.5376	3.5361
Jupiter	11.8621	5.200	140.7086	140.61
Saturn	29.4571	9.510	867.7198	860.08

	Period (days) -----	a from Periods -----	a from Orbits -----	Percent Difference -----
Mercury	87.97	0.3871	0.3881	0.26
Venus	224.70	0.7233	0.7241	0.11
Earth	365.25	1.0000	1.0000	----
Mars	686.98	1.5237	1.5235	0.01
Jupiter	4332.62	5.2012	5.200	0.02
Saturn	10759.20	9.5381	9.510	0.29