δίο καὶ Πλάτων αὐτὸς ἐμέμψατο τοὺς περὶ Εὔδοξον καὶ Ἀρχύταν καὶ Μέναιχμον εἰς ὀργανικὰς καὶ μηχανικὰς κατασκευὰς τὸν τοῦ στερεοῦ διπλασιασμὸν ἀπαγεῖν ἐπιχειροῦντας, ὥσπερ πειρωμένους δι᾽ ἀλόγου[1] δύο μέσας ἀνάλογον, ᾗ παρείκοι, λαβεῖν, ἀπόλλυσθαι γὰρ οὕτω καί διαφείρεσθαι τὸ γεωμετρίας ἀγαθὸν αὖθις ἐπὶ τὰ αἰσθητὰ παλινδρομούσης καὶ μὴ φερομένης ἄνω μηδ᾽ ἀντιλαμβανομένης τῶν ἀίδιων καὶ ἀσωμάτων εἰκόνων, πρὸς αἵσπερ ὢν ὁ θεὸς ἀεὶ θεός ἐστι.

Συμποσιακά (*Quaestiones Convivales*): 718 e-f (Book 8, Chapter 2, Section 1)

"Therefore even Plato himself harshly criticized Eudoxus, Archytas, and Menaechmus for attempting to reduce the *duplication of the cube* to mechanical constructions with instruments, just as though they were trying, in an unreasoning way, to take two mean proportionals in continued proportion any way that they might; in this way the good of geometry is utterly destroyed and it falls back on the senses; it is not carried above to apprehend the eternal and immaterial forms, before which God is always God."

Two line segments CD and EF are *mean proportionals in continued proportion* between AB and GH if

$$\frac{AB}{CD} = \frac{CD}{EF} = \frac{EF}{GH}$$

Hippocrates of Chios (ca. 470 – ca. 410 BCE): If, in addition, $GH = 2AB$, then

$$AB \cdot EF = CD^2 \quad \text{and} \quad 2AB^2 = CD \cdot EF,$$

so

$$2AB^3 = CD^3.$$

[1] variant readings: δίχα λόγου, διαλόγου