

1975-10-30

229

Aerial root grafting

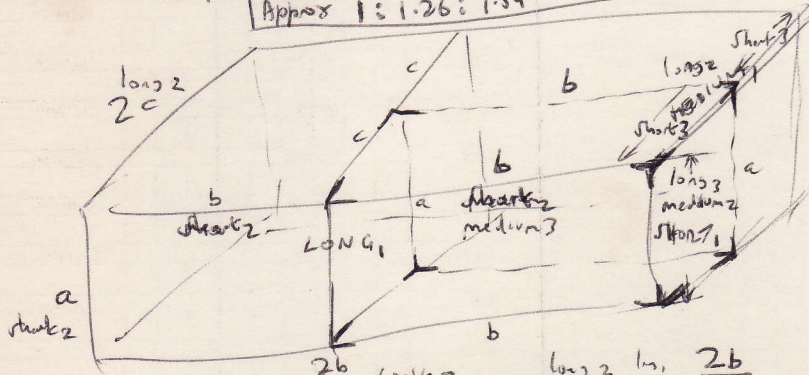


Divisible box. Divide in half across long dimension, proportions of 2 smaller boxes always same as larger one at infinity.

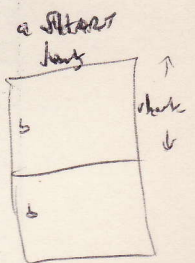
1977-11-22

$a = \sqrt{2}b, b = \sqrt{2}c, a = \sqrt{2}c$   
 Approx 1:1.26:1.59

$abc \rightarrow 2abc$



$ba = 2c^2$   
 $2cb = a^2$   
 $ac = b^2$



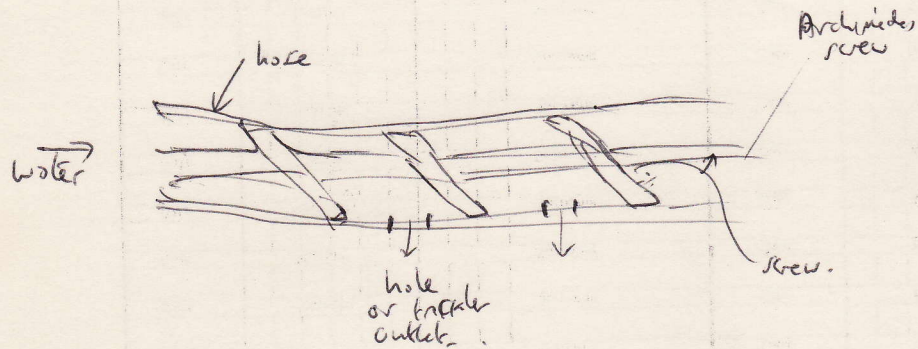
$\frac{2b}{2c} = \frac{2c}{a} = \frac{a}{b} = \frac{a}{c}$

$\frac{\text{LONG 3}}{\text{MEDIUM 3}} = \frac{\text{LONG 2}}{\text{MEDIUM 2}} = \frac{2b}{a}$

$\frac{2\text{LONG 2}}{2\text{SHORT 2}} = \frac{\text{LONG 1}}{\text{SHORT 1}}, \quad \frac{2b}{a} = \frac{a}{b}$   
 $\text{LONG 1} = 2\text{SHORT 1}, \quad 2b^2 = a^2$   
 $\frac{b}{a} = \frac{1}{\sqrt{2}}$

ARCHIMEDES TRICKLE HOSE

1979-4-5



Concept is simply to have an Archimedes screw work inside the hose, rotate occasionally to clear roots and force debris to end. Rotation might be quite slow (once/hr) and could be automatic (flow driven). The hose could be used underground,

Outlet holes & screw vanes could be placed discontinuously (vary by the screw) to give a trickling outlet

With cut cobbles removable to clear debris etc