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**Geodaesia, Geometria, Technica, Chemica - Cod. Durlach
35**

Wagner, Theodor

[Solms], [1607]

Tractatus IIII. De Geodaesia rectarum è triangulis similibus

[urn:nbn:de:bsz:31-239855](#)

TRACTUS IIII.

DE GEODÆSIA RE^E
CTARUM ē TRĒAN^U
q̄uis s̄im̄
LIBUS.

Ad hanc geodæsiam instrumentum
Radius, distin^m Commodissime
attributus.

mon autem solū metiendis terris
sed astris loco & ordine desig-
nandis @ precipiē suscipiē
& tandem

sic itū ad astra



T.

LONGITUDINES DIRE
TIENDE RATIO.

Apparatus.

Si visus sit ab initio indicis „recti“, in metra
Longitudinis, erit ut segmentum indicis
ad segmentum Transversarii, sic morsorii
albitudo ad longitudinem

Segmentum indicis ē. 6.

Segmentum Transversarii. 18.

morsoris albitudo .q. pedum

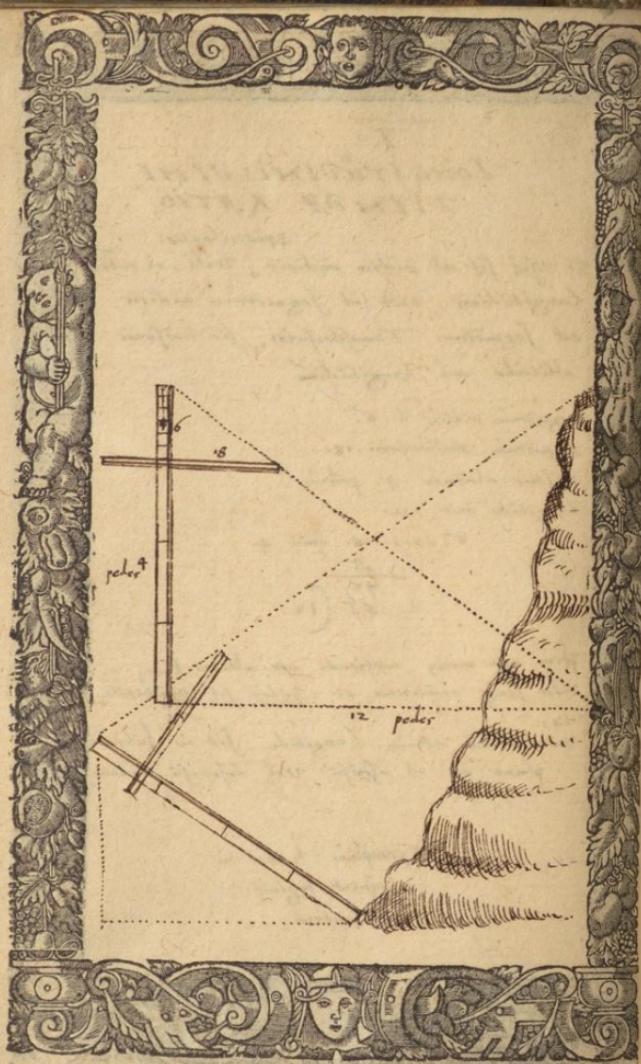
Longitudo erit .12.

.5. dant. 18. quid q.

7²
6² (12.

Istem erit modus mordendi ex alteri loco.
Der secundus regimur ut fuligo sit perpendicularis
et.
Decimotercer utrum Longitudo sit in subiecto
plano, an in ascensu vel decessu mecentur.

Exemplum habet in
sequentia paginae
Latere.



II LONGITUDINIS

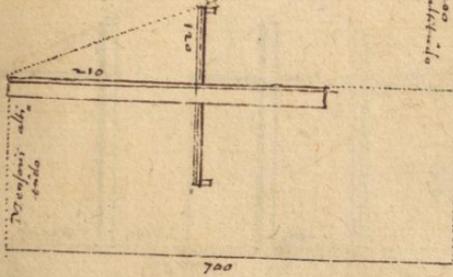
Si visus sit ab initio videtur paralleli,
erit, ut segmentum Transversarii ad segmentum
tum Iustis, sic data altitudo ad longitu-
dinem.

Segmentum transversarii sit 120 partium
Data altitudo 400 pedum
Segmentum videtur 210. partium
Longitudo erit 700 pedum.

$$120. \text{ dant } 210 \text{ quid } 400$$

$$\begin{array}{r} 84000 \\ \times 200 \\ \hline 168000 \end{array}$$

Exemplum.



data altitudo

III

LONGITUDO Duplir; Distantie.

Si visus sit ab initio Transversarii paralleli,
erit, ut in indicre differentia majoris segmenti
ad minus, sic differentia secundae distantie
ad Longitudinem.

Differentia priui segmenti sit 36 pedium
secundum segmentum 72.

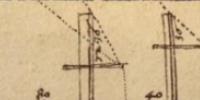
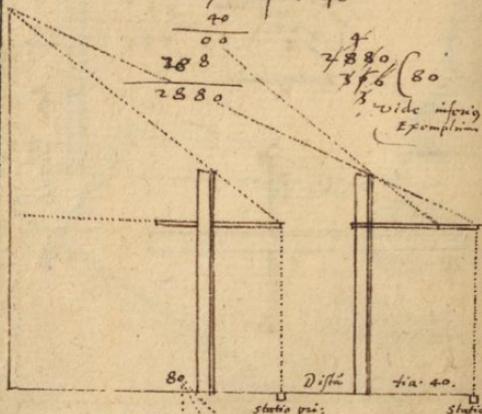
Differentia secundae distantie 40. pedium.
Quæsta longitudine est 80. pedium.

36. dant 72 quid 40

$\frac{40}{36}$

$\frac{288}{288}$

$\frac{480}{376}$ (80
vide infra
Exemplum.



1111. ALTITUDINIS

Si visus sit ab initio Transversari recti
appendiculae Justice, erit ut segmentum
Transversari ad segmentum Justice, sic
data longitudine ad altitudinem.

Segmentum Transversari sit .30 parti:
Segmentum Justice .20. partim
Longitudo una .120. podimi.
Altitudo quæsita erit .72. podimi.

$$\begin{array}{r}
 60 \text{ datur} \quad 36 \text{ quid} \quad 120 \\
 \hline
 36 \\
 4320 \quad (72. \quad 380 \\
 4320 \quad \hline
 4320
 \end{array}$$

120



VI

PROTUNDITATIS.

Dimeſio ſeu pntci. tunc

Si Viſus ſit ab initio Indiis paralleli; ouit
ut Segmetum Transversarii ad Segmen-
tum iudicis, ſic data Longitudine ad alti-
tudine.

Segmentum Transversarii ſit 5. partium

Segmentum iudicis 13.

Diametru pntci 10. pedum

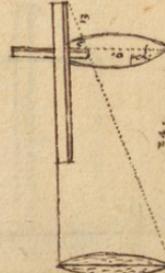
Profunditas erit 20. pedum.

ſit illatim Segmentum iudicis ſupra orum
pntci 13. reliquias vero elatiō pntci
24. pedum

5 dant 13. quid 10

$$\begin{array}{r} 10 \\ \times 13 \\ \hline 130 \end{array}$$

130 (26. telli - 2. pedes)
58 X remansit 24.



VI

Ex DATA LONGITUDINE

altitudinem querere

Si usq[ue] sit ab initio m[er]idi[um] recti, eit
ut segmentum Transversarii, sic datur longi-
tudo ad altitudine.

Indire segmetum e. 60. partim

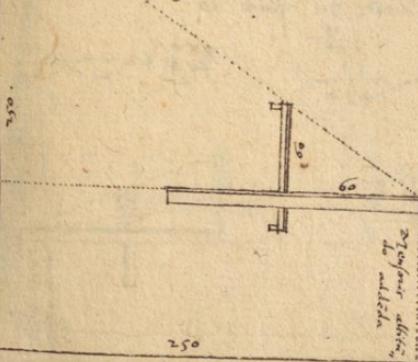
Transversarii segmentum 60 parti:

Longitudo data 250 pedum,

Altitudo quæsita eit 250 pedum

$$60 \text{ datur. } 60 \text{ quid } 250$$

$$\begin{array}{r} 3 \\ 15000 \\ 6000 \end{array} \quad \begin{array}{r} 000 \\ 250 \\ 60 \end{array}$$



VII

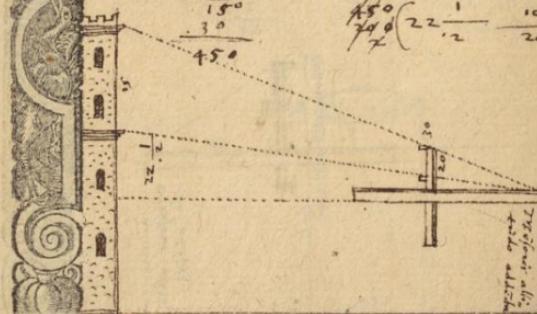
EX ALTITUDINIS NOTA
parte reliquum cognoscit
p pinnas trans
versari.

Si visus sit ab initio fundis recte paralleli
p pinnas transversari in terminos nota
partis, erit aut segmentum vel interwallum
pinnarum ad reliquum supereminet
transversari, sic nota pars ad reliquum.
Interwallum pinnarum Transversarum sit 20 parti:
Nota pars altitudinis - 15. pedum
reliqua pars transversari extra Interwallum
Transversarum .30.

20. dant. 30 quinque 15.

$$\frac{15}{1} \quad \frac{1}{22.2} \quad \frac{10}{20}$$

$$\frac{150}{150} \quad \frac{1}{22.2} \quad \frac{10}{20}$$



VIII
ALTITUDES DIME^{nt}
sio per distantias

Si usus sit ab initio indicis recti, erit
et in endre differentia segmenti ad diffe-
rentiam distantie, sic segmentum Trans-
versarii ad altitudinem.

Differentia indicis est 23. parti.

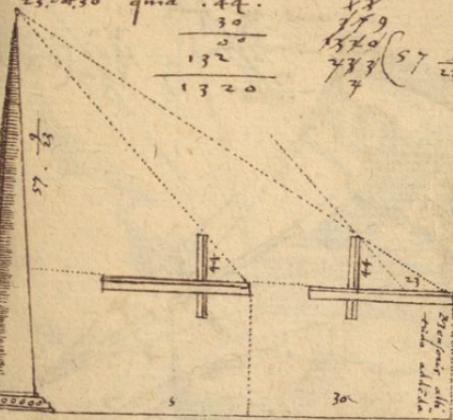
Differentia distantie 30 pedum

Segmentum Transversarii 44.

Altitude quaestra erit $52 \frac{9}{23}$ pedum.

$$23. \cancel{d} \cancel{s}. 30 \text{ quid } 44. \\ \underline{30} \\ 3 \cancel{0} \\ 132 \\ \underline{1320}$$

$$x \cancel{x} \\ 179 \\ 1320 \\ 483 \\ 7 \cancel{7} \\ 57 \frac{9}{23}$$



lx
LATITUDINIS
dimensio.

Si visus sit ab initio midis recti per pinas Transversarii in terminos latitudinum, erit ut in indice differentia segmenti ad differentiam distantie, sic intervallum primarum ad latitudinem.

Differentia segmenti in factice ē 30.

Distantia distantie linearum statim: 49.

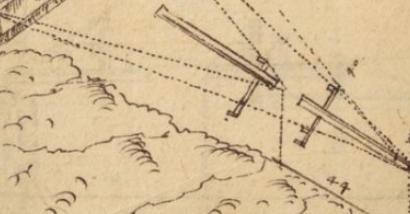
Intervallum primarum . 90.

Erit quæ sita latitudine $58 \frac{2}{3}$ per.

30 dant 44 quid 40.

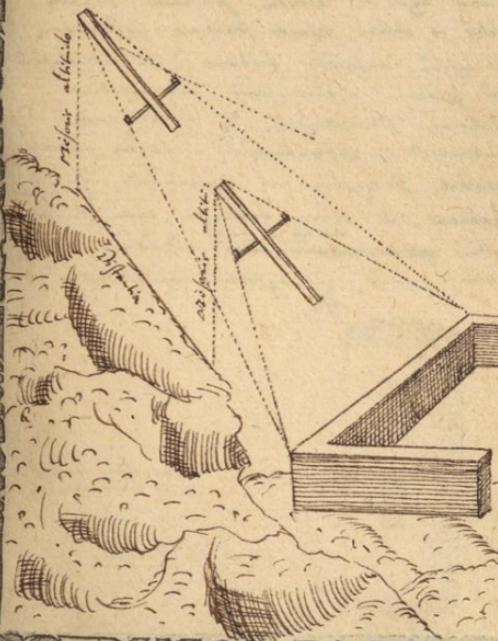


$$\frac{14.60}{3.60} \left(58 \frac{2}{3} - \frac{2}{30} \right)$$



x
*Latiſtudo dimetienda
ex edetiori Loco.*

*Eadem goodasia erit si ē loco ſupero
natiōis ſubjetam latitudinem.*



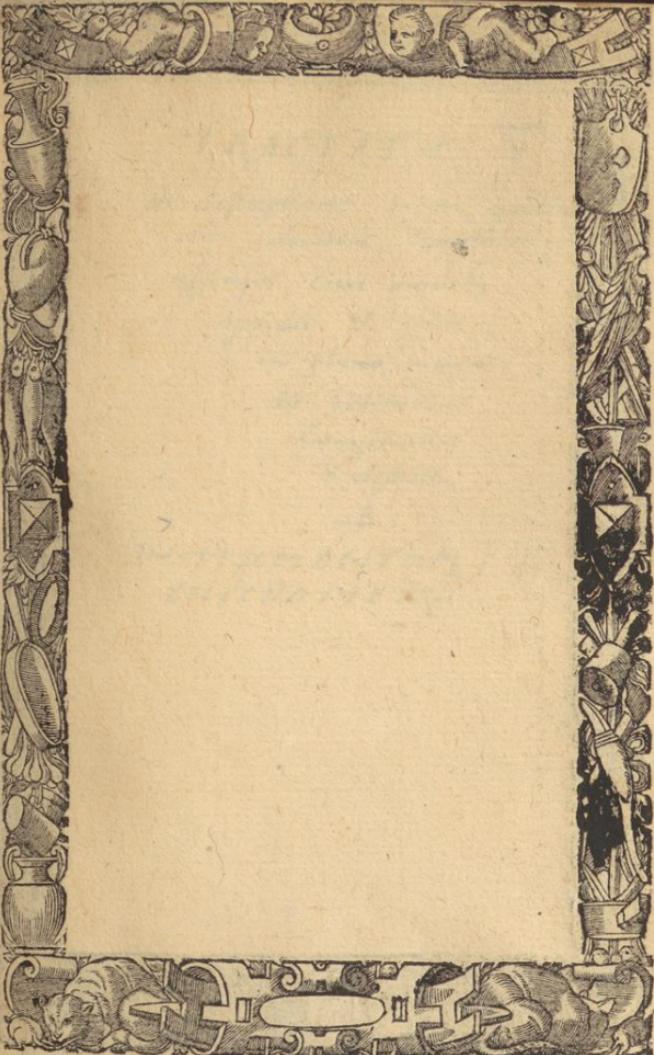
XI.
DE MENSURATIONE REI
ROTUNDÆ. ut Turris
Vel rei alterius.

Acepero baculum, & respice famber pinnulas,
in cuius Transversarii donec extenui-
tatem tarris, in latereb⁹ affectibus faci;
idem agas in altera statione, rotata
prout in aliis primas statim sectiones.
Si igitur contuleris sectiones, seu intercapodini
in hechom⁹ uideris, cum intercapodinae
sectiones Transversarij, & turbis cum
intercapodinae distantes in terra, facile
probit Diametrum rei uenturum. quia si
habueris, in terra delineare eum ex
illius ^{centro seu medio} circulum de scia-
bore, poteris, qui agitum exhibebit.



Capacitas turris
in Circumferentia





66

