

S O L U T I O.

CAP.
XXII.

Posito Radio $AC = 1$, fit Arcus quæsitus $AEB = 2s$,
ut fit ejus semissis $AE = BE = s$: ducto ergo Radio CE ,
erit $AF = \sin.s$, & $CF = \cos.s$: Unde fit Triangulum ACB
 $= \sin.s \cos.s = \frac{1}{2} \sin.2s$; & ipse Sector ACB est $= s$,
qui cum æquari debeat duplo Triangulo, erit $s = \sin.2s$; ideo-
que Arcus quæri debet, qui æqualis fit Sinui Arcus dupli.
Primum quidem patet angulum ACB recto esse majorem;
ideoque s superare 45° , unde sequentes faciamus hypotheses

$s = 50^\circ$	$s = 55^\circ$	$s = 54^\circ$
$l.s = 1,6989700$	$1,7403627$	$1,7323938$
subtrahe $1,7581226$	$1,7581226$	$1,7581226$
$9,9408474$	$9,9822401$	$9,9742712$
$l.\sin.2s = 9,9933515$	$9,9729858$	$9,9782063$
$+ 525041$	$- 92543$	$+ 39351$
92543		
$617584 : 525041 = 5^\circ : 4^\circ, 15'$		

Erit ergo propemodum $s = 54^\circ, 15'$: unde ad superiores hypotheses addamus $s = 54^\circ$, & ex erroribus concludetur $s = 54^\circ, 17', 54''$, qui valor a vero minuto integro non discrepat: faciamus ergo sequentes positiones minuto tantum discrepantes

$s = 54^\circ, 17'$ feu $s = 3257'$ & $2s = 108^\circ, 34'$ compl. $= 71^\circ, 26'$	$s = 54^\circ, 18'$ feu $s = 3258'$ & $2s = 108^\circ, 36'$ compl. $= 71^\circ, 24'$	$s = 54^\circ, 19'$ feu $s = 3259'$ & $2s = 108^\circ, 38'$ compl. $= 71^\circ, 22'$
$l.s = 3,5128178$	$3,5129511$	$3,5130844$
subtrahe $3,5362739$	$3,5362739$	$3,5362739$
$l.s = 9,9765439$	$9,9766772$	$9,9768105$
$l.\sin.2s = 9,9767872$	$9,9767022$	$9,9766171$
$+ 2433$	$+ 250$	$- 1934$
	1934	
	2184	

fiat ergo $2184 : 250 = 1' : 6'', 52'''$

Q q 3

Hinc