Drawings, Models and Calculations

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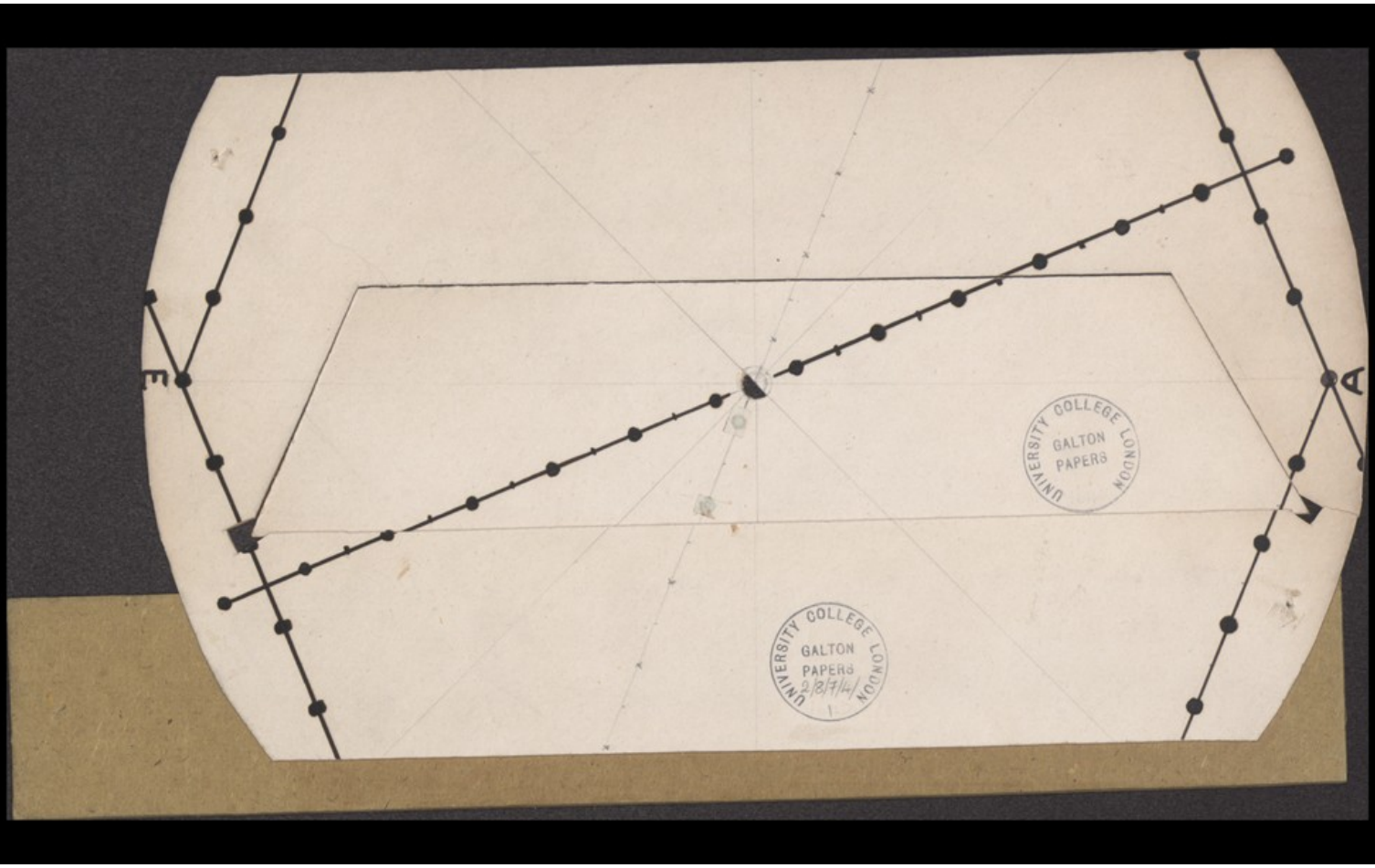
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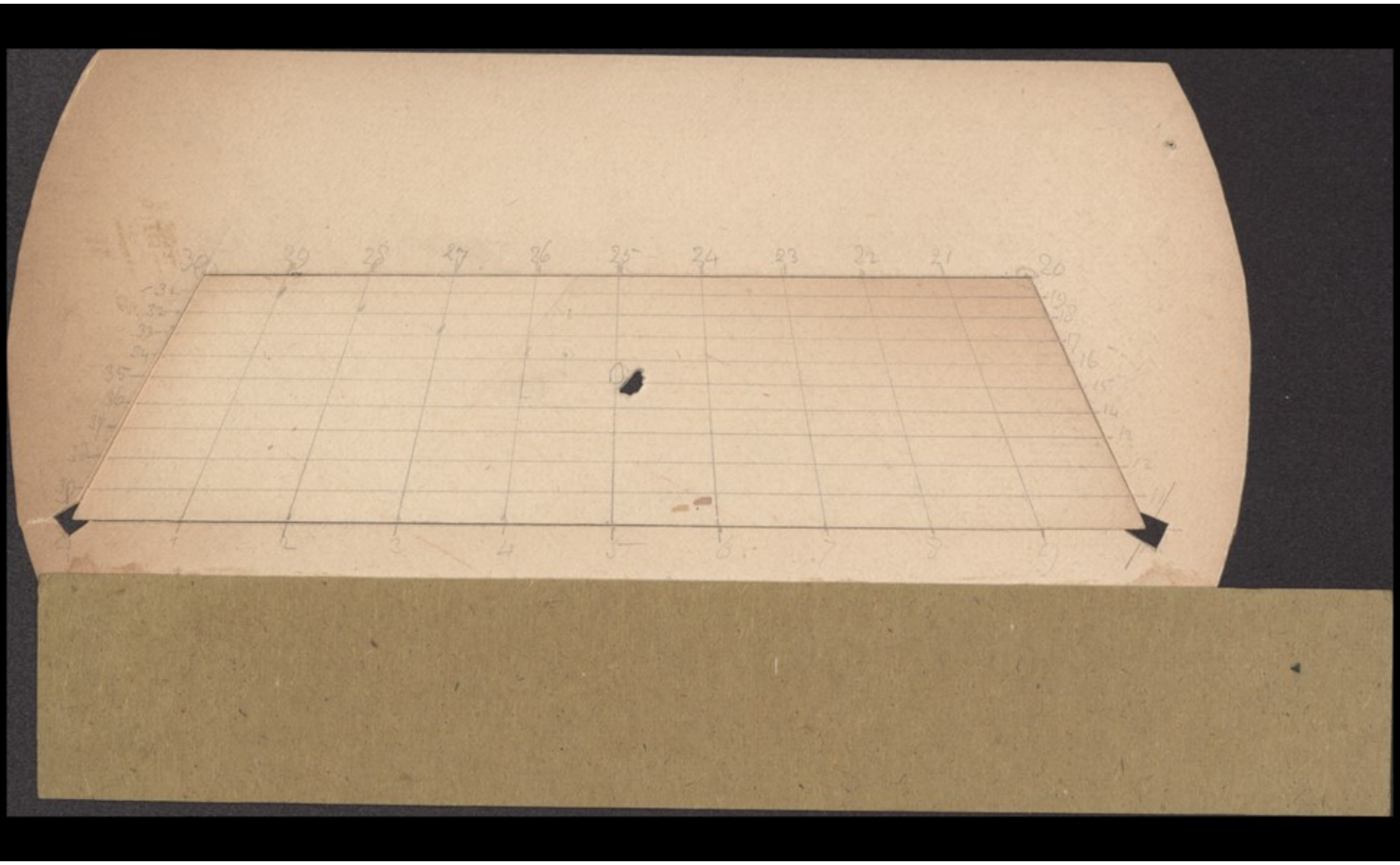
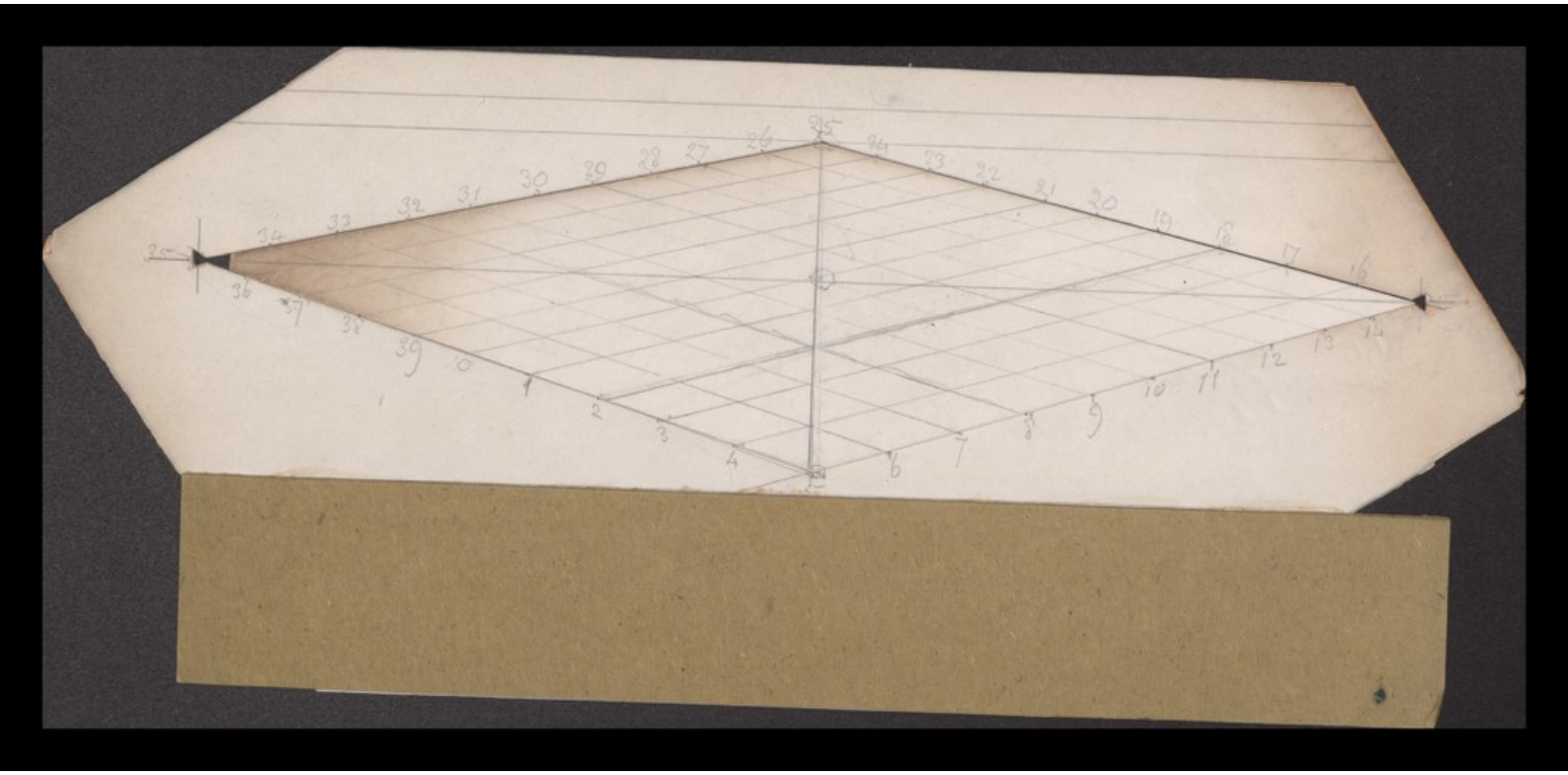
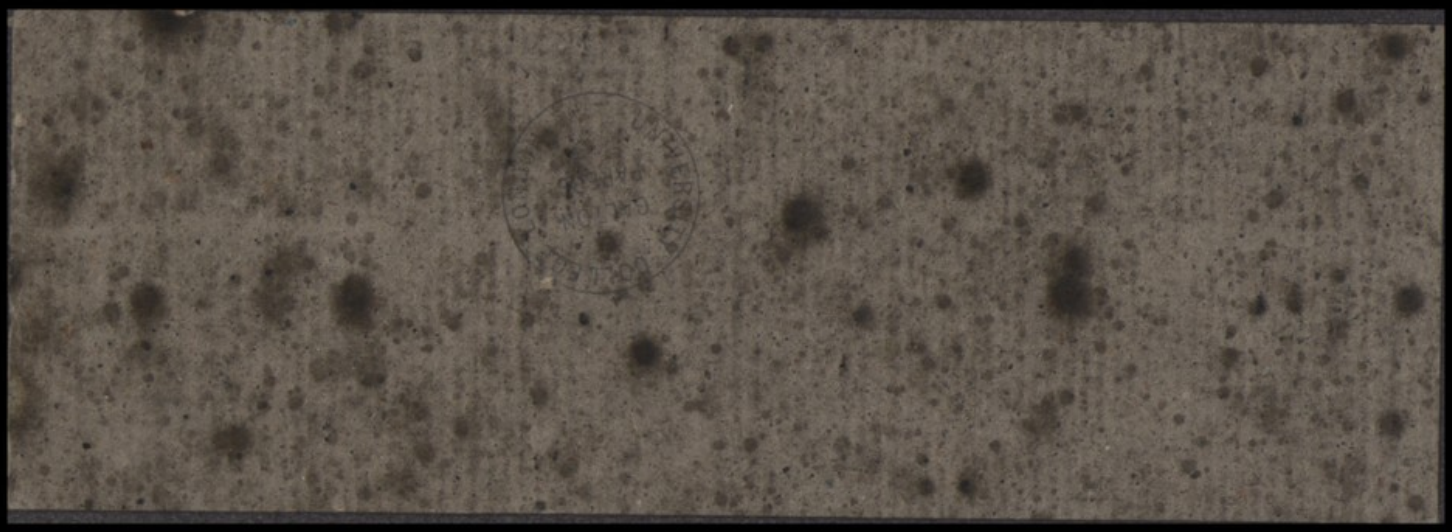
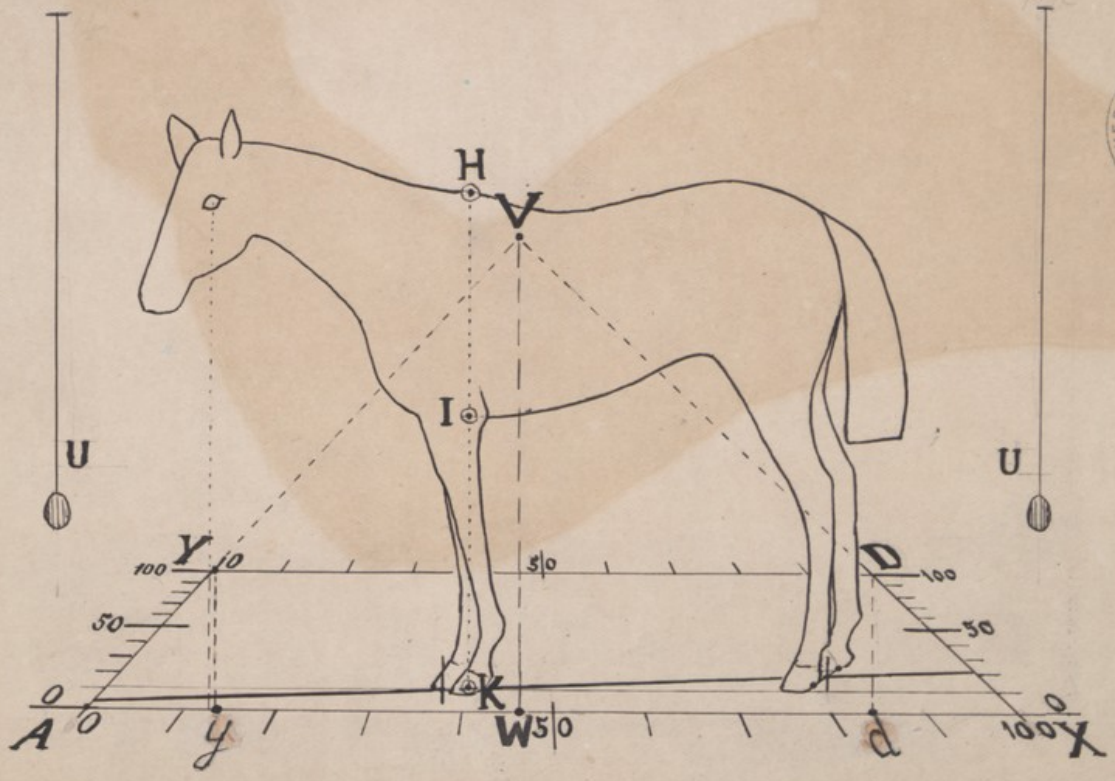
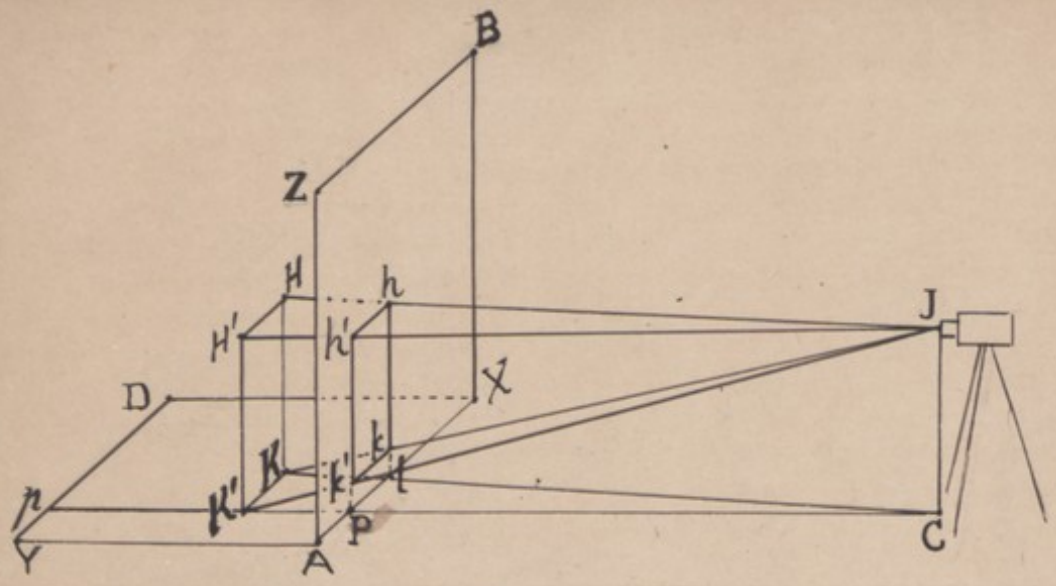
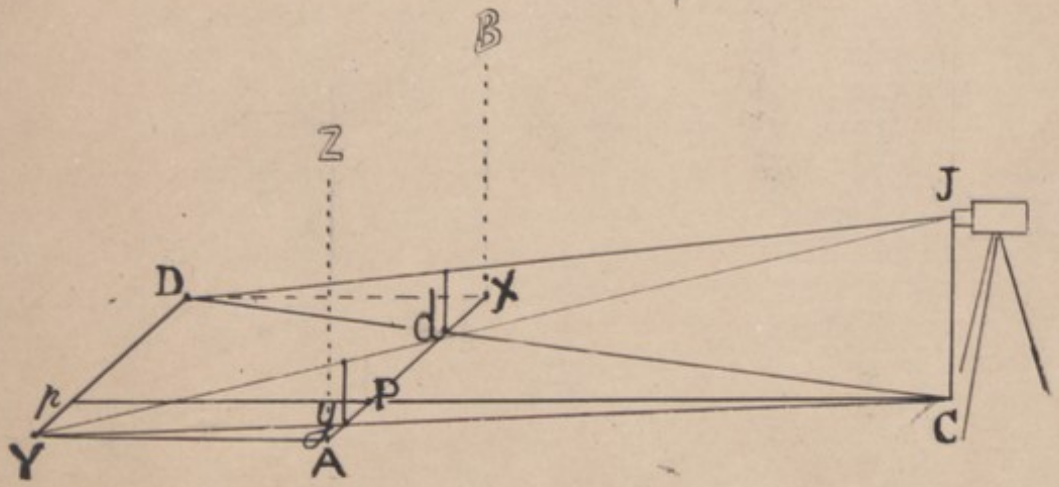


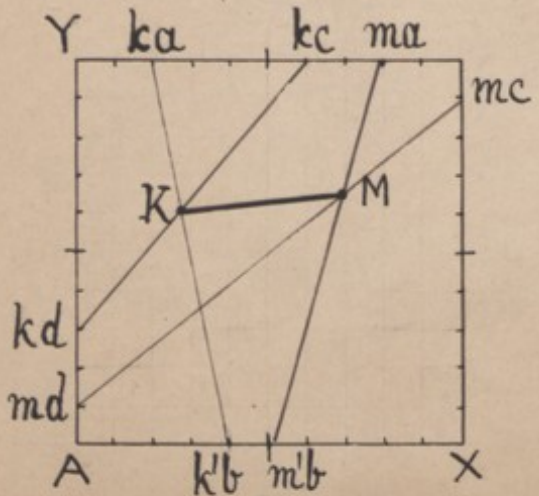


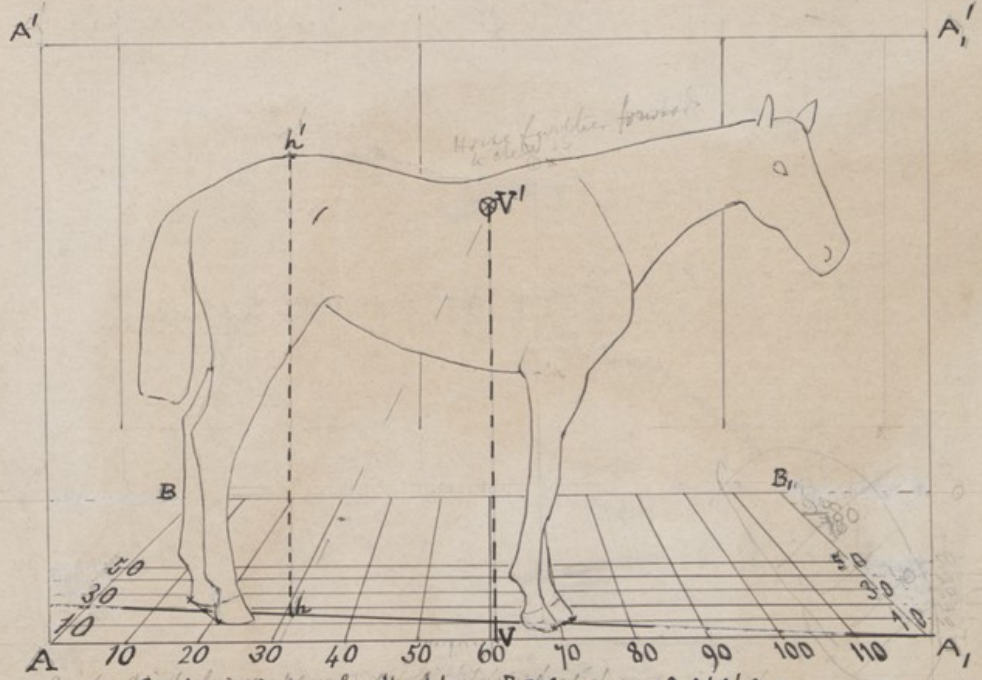




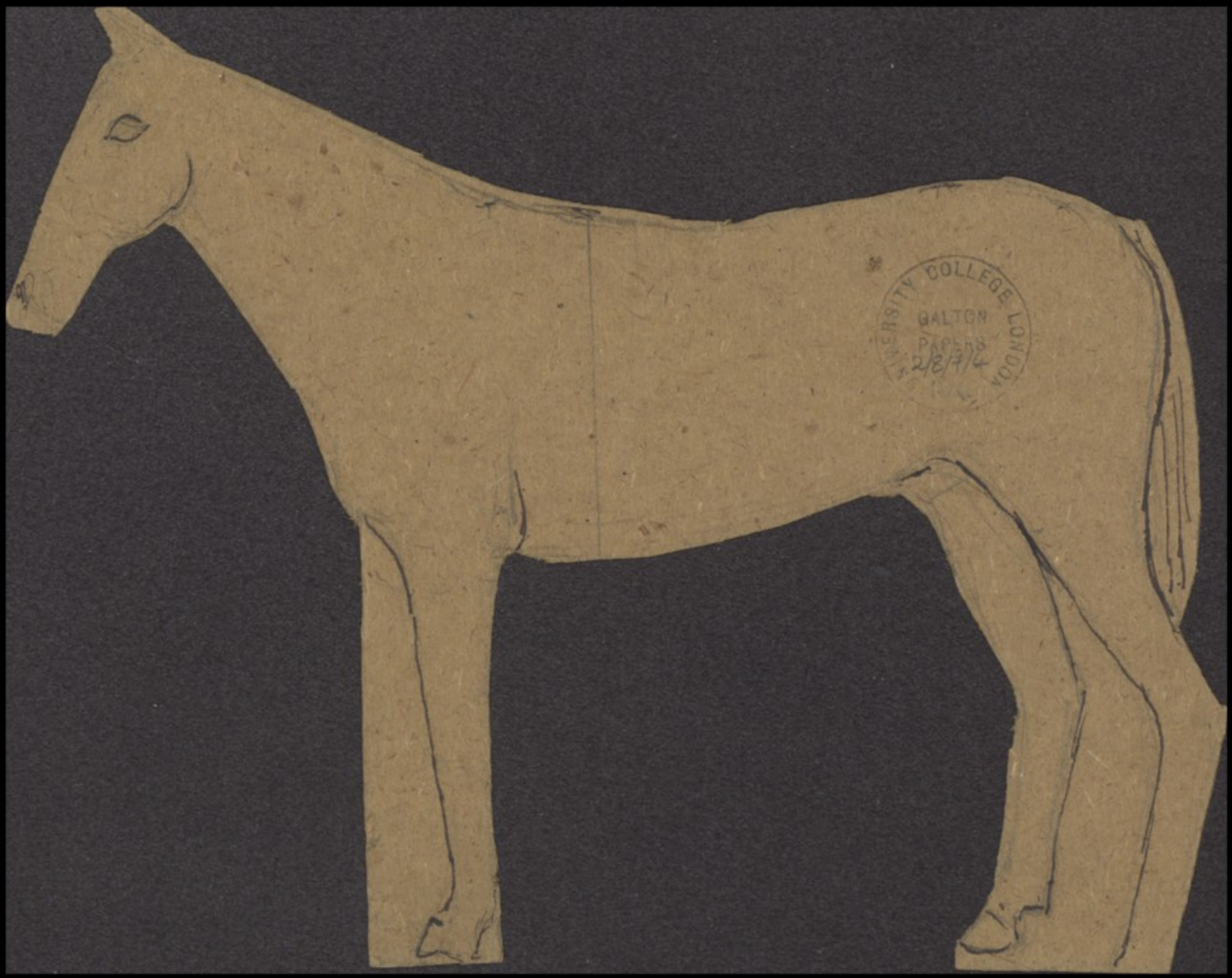


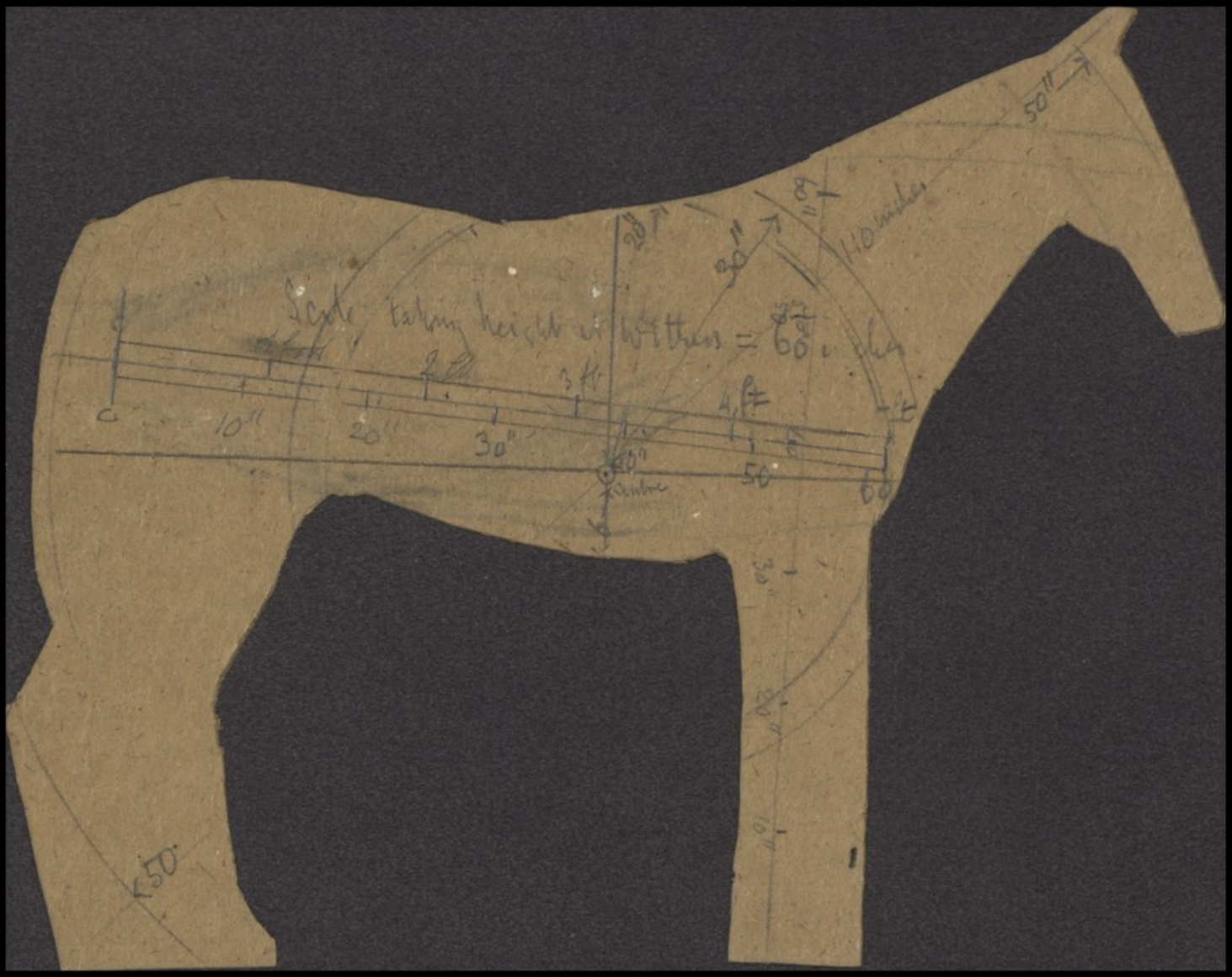


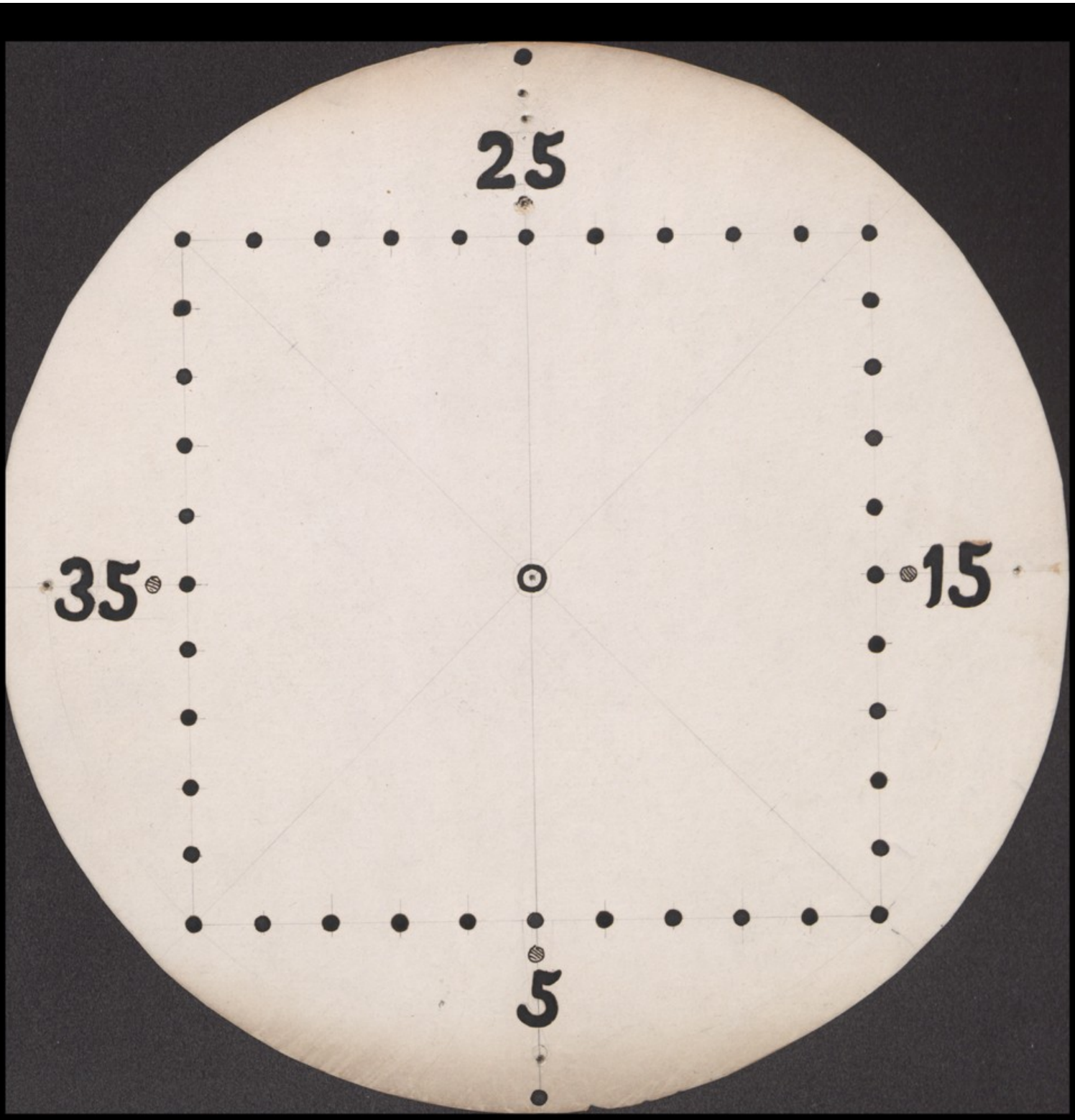




Scale in inches for the plane of reference AA'A,A,




Scale taking height at Withers = 60 inches
10"
20"
30"
40"
50
60
50"
8 ft
14 inches
3 ft
4 ft
5 ft
50


25
35
15
5


68 261 6-3.85
204
57.5
544
310
26.15 wide
6.8 ab.
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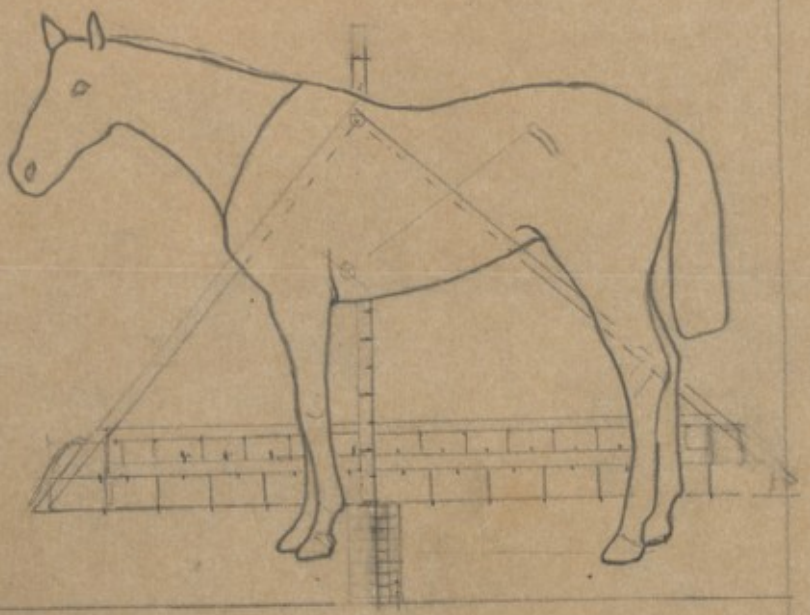
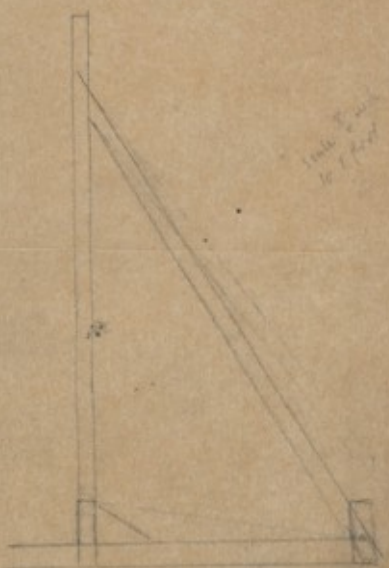
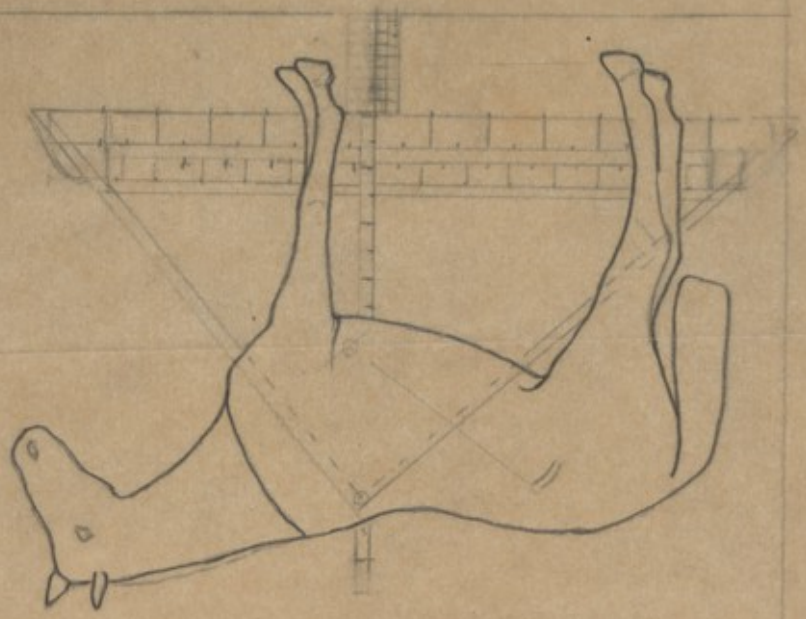
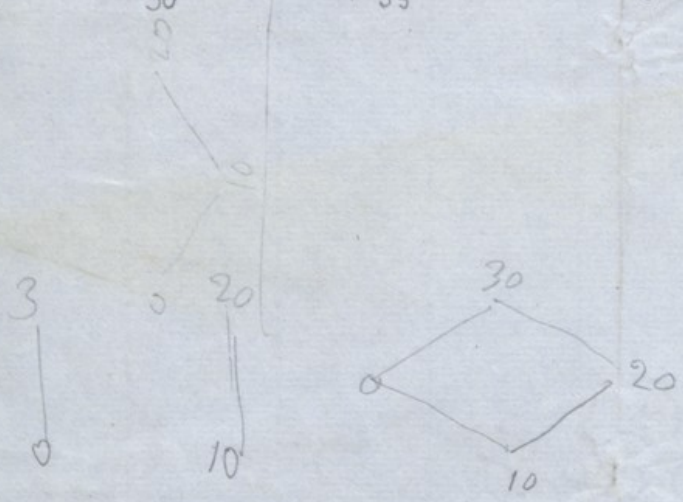






39 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
5 10 15 20 25

20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 0
25 30 35 0 5



Given a = 5 feet = 60 "
d = 20 feet = 240 "
b = 20 " } to find $\alpha_1 + \alpha_2 = \alpha$

d = 240
b = 19 } — " $= \alpha'$

= then the value of $\alpha' - \alpha$

$\frac{20 \times 240}{220} = \frac{4800}{22} = 218$

$\frac{19 \times 240}{221} = \frac{4560}{221}$

$\frac{20 \times 60}{220}$ $\frac{1200}{220} = 5.45$

diffce = 0.02

$\frac{20 \times 60}{221}$ $\frac{1200}{221}$ 5.43.

Value of $\alpha_1 + \alpha_2$

$b = 30$ $b = 20$

$b = 30$ $\frac{ba}{d-b}$ $\frac{30 \times 60}{210} = \frac{1800}{210}$ — 5.45 — 8.57 — 3.12

$b = 25$ $\frac{25 \times 60}{215} = \frac{1500}{215} =$ 6.98

$b = 35$ $\frac{35 \times 60}{205} = \frac{2100}{205} =$ 10.25

$b = 20$ $\frac{20 \times 60}{220} = \frac{1200}{220} =$ 5.45

25

30

35

40

45

40 $\frac{40 \times 60}{200} = 12.00$

$b = 15$ $\frac{900}{225} = 4.00$

$b = 45$
$\frac{45 \times 60}{195} = \frac{2700}{195}$
$= 13.85$

1.53	0.06
1.59	0.06
1.68	0.07
1.75	0.07
1.85	0.07

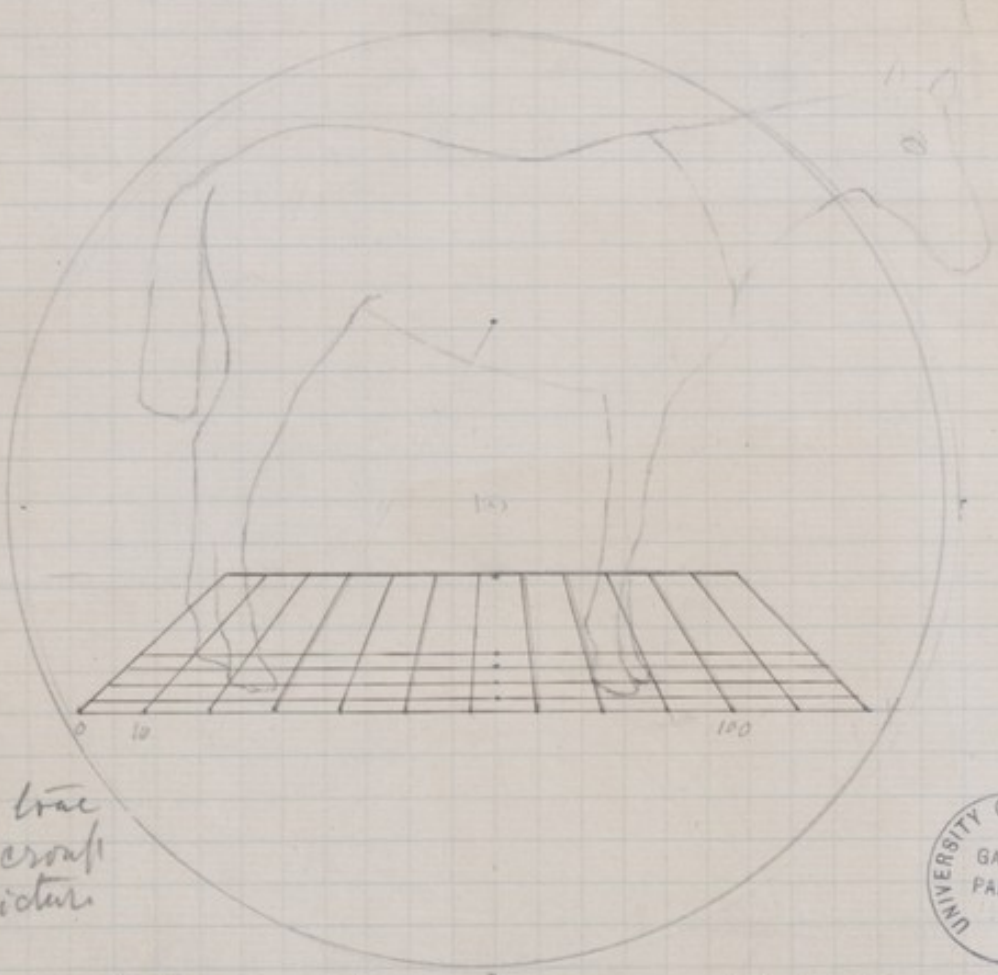
6.98
8.57
10.25
12.00
13.85

1.7 : .06 :: 1 : x

$x = \frac{.06}{1.7} = .035$

or 0.035 diff^{ce} in side scale for whole correspondes to a coorde of about 1.0 inch in apparent height of house

1 mm ⊢ 1 inch



To find true height of crosses in the picture

$EF = 40$ $ef = 60$ $d = 15$ by measure on title scale
$l = 40$ $\lambda = 60$ $b = 100''$ (hereafter make it $12ft = 120''$)

$$a = \frac{bl}{\lambda - l} = \frac{4000}{20} = 200''$$

$a + d = 215$

$\sigma \pm hh' = 63.5$ by measure on (vertical) scale

$$s = HH' = \sigma \cdot \frac{a+d}{a} = 63.5 \cdot \frac{215}{200} = \frac{13652.5}{200} = 68.26.$$

Subtract $d = 5$

$$63.5 \times \frac{205}{200} = \frac{13017}{200} = 65.08$$ by 5 in under 1½ real diff.