

## APPENDIX ONE:

### A Royal 'Haagse klok'

### "Severyn Oosterwijck Haghe met privilege"

Reviewed by Keith Piggott

#### DIMENSIONS AND CONSTRUCTION

'Ø' denotes original part

'®' denotes replacement part

Oosterwijck's clock is comparable with Coster's known striking Hague clocks, (see Plomp, Op.Cit. nr.38 at page 120 - being D8 in new chronology; see also R. Plomp, "Prototypes", Op.Cit. p.202, Figs.6, 7,8 - D10 in new chronology).

Dimensions are given in Metric units

#### Dimensions of Box Case Ø <Table 1>

Box External	H.25.4	W.21.0	D.7.6cm
Box Internal	H.20.7	W.16.2	D.7.0cm
Door Frame	H.25.75	W. 21.2	cm
Door Reveal	H.20.7	W. 16.2	cm
Door Stiles	W. 2.5	x 1.65	cm thick
Total Depth incl. Frame	D.9.25	cm	
Ends/Sides	2.5 cm thick incl, veneer		
Backboard	0.6 cm thick, solid. wood		
Sound Holes	3.5 cm side, 4.1 cm under		

Thickly sawn (Macassar?) Ebony veneers cover the external surfaces. Facing corners are mitred. Two thin brass Hinges, are set into rebated 45-degree mortises, the hinge plates filled then and covered by veneers.

The Carcass is constructed of solid show-wood, identified as Kingwood (*Dalbergia Cearencis*). Mr Howard Page suggests *Cocobolo* (*Dalbergia Retusa*). Hague clocks, typically, are veneered inside with Padouk (*Pterocarpus spp.*) or Indian Rosewood (*Dalbergia latifolia*).

The choice of Kingwood, and its use in the solid, is exceptional. Typical Dutch and French carcasses are of Deal. Was Oosterwijck's choice, of 'royal timber', a visual and metaphorical pun.

#### Dimensions of Movement Ø <Table 2>

BRASS DIAL Ø	H.21.2	W.16.5	cm	2.2	mm thick,
clad in uncut velvet.					
Chapter Ring Ø	Brass	14.3	x 10.3	cm	Annulus
2.0 cm, 1.18mm thick, 4 studs.					

#### Hands - Gilt Brass. Ø

Hour 5.1cm

Minute 7.05 cm, steel pointer Tip.

Dial Feet - Round, Four 6.50 mm deep, undercut for the hour wheel.

#### Folding Pendulum Holdfast: Ø

Brackets Brass 13.5 x 21.5 mm

1.15 mm thick, each with 2 rivets,

T-Spring Steel, 15 x 6 x 31.5 mm 1.25 mm thick, Cranked Retainer Brass 56.0 x 13.5 mm the 'shaped foot acts as a geometric lock. fixed by 3 steel rivets.

#### Movement plates: Ø

Back plate 11.5 x 9.4 cm (pinned)

Thickness 2.15-2.33 mm

Front plate 11.5 x 9.4 cm

Thickness 2.22 mm.

Pillars (4) 3.8 cm between plates, Octagonal section 7.85-8.05 mm.

#### Dial Apertures: Ø

Pendulum Access 1.8 x 4.0 cm. covered by signature cartouche.

Cutout Sector 2.05 x 1.2 cm. Recess for motion cock, short dial feet.

Both holes covered by uncut velvet.

#### SPLIT (Going & Strike) BARREL: Ø

Diameter 43 mm Length 25 mm

Barrel Arbor Length 55.56 mm Square for winder 3.6 mm.

Great Wheels: (NL.'Grondrad')

REAR G1 49.4 mm diam. 72 teeth

FRONT S1 49.95 mm diam. 80 teeth

#### Ratchet and Stop work:Ø

Both on S1, First Strike-wheel, the stop work beneath ratchet and wheel.

#### Ratchet work Ø

Brass circumferential spring, steel Click to steel

Ratchet wheel having 21 Teeth,

Diameter 34.4 mm 1.85 mm thick

Boss diam. 11.0 mm 4.85 mm deep having a curious "spur-cam" (L), pinned to squared arbor.

The Contractual "secret" ?



#### Stopwork: Ø

Stop wheel Diam. 10.3 mm 1.25,

8 leaves- 6 cut, Driven by single pin in barrel-arbor.

A brass spring engages the stop wheel to act as a simple Click.



## THE WHEEL TRAINS: ø <Table 3>

### GOING TRAIN: ø

Original train, except for escape teeth being recut.

#### Wheel Count:

**70/5x60/5x54/60 = 151.2 beats;**

**Nominal Pendulum = 15.6 cm**

Extant Pendulum: 16.45 cm

**G4** Escape wheel ø p.5/ 27 teeth  
teeth ø but recut diam.28.7 mm  
Cross ø Collet ® Pinion ®

**G3** Contrate-wheel ø p.5/ 60 teeth  
Collet ® diam. 37.3 mm

**G2** Centre-wheel ø p.6/ 70 teeth  
diam. 39.4 mm Domed collet ø  
Wheel at Back plate. Pinion at Front plate.

**G1** First-wheel ø 72 teeth  
Diam. 49.4 mm

Pinion diameters ø Centre 4.82 mm  
Contrate 3.5mm Escape® 3.7 mm

**Centre Arbor** ø Length 59.4 mm  
Taper diam. 3.95 mm Relief 2.15 mm

**Center Pinion** ø 6 Leaf  
4.82 mm diameter 4.7 mm long.

### MOTION WORK: ø

Minute-wheel 32 teeth,  
Single pin for (English) Hour strike.  
Diameter 41.5 mm.  
Reverse-Minute 32 teeth / p.6  
Diameter 33.0 mm.

Hour-wheel radial marking 72 teeth,  
43.2 mm diameter. Cannon 'dimpled'.  
Transverse pin secures hour hand.

### STRIKE TRAIN: ø

**SF** Fly p.5 / 2 vanes  
Lozenge Vanes W.22 L.25 mm  
**SF** pinion 3.6mm diam.

**S4** Fourth-wheel p.6 / 48 teeth  
Diam. 28.8 mm  
**S4** pinion 4.7 mm diam.

**S3** Warning-wheel p.6 / 48 teeth  
2 brass pins,  
Diam. 32.5 mm Domed collet ø  
**S3.** pinion 4.9 mm diam.  
Warning-pin re-sited 18mm on same radius

**S2** Pin-wheel p.8 / 60 teeth  
Diam. 40.6 mm **10** steel pins\*  
**S2.** pinion 5.25 mm diam

**S1** First-wheel 80 teeth  
At front plate 49.4 mm diam.

### STRIKE WORK ø

Strike Lever (1970 restorer's scribed motion wheel  
"Lever added/adjusted/repared"  
Note must refer to the repaired Hammer lever.

### Strike Gates ø

Steel scrolls, 2 below, 1 longer above.

### Count-wheel ø

12 unequal detent slots, I to XII, diameter 72 mm.  
Drive-wheel 78 teeth, 50 mm diam.  
External Pinion of **10\*** on Pinwheel arbor square.  
(\*cf.Coster D8)

### Hammer ø

Brass clapper with inset steel striker, dovetailed  
onto a steel stem, but now, extended and its arbor  
now is wrongly planted in the adjacent pivots.  
Original hammer pivots have stop-pins, the  
hammer-spur to original thick brass "L" spring; now  
re-profiled also as stop.

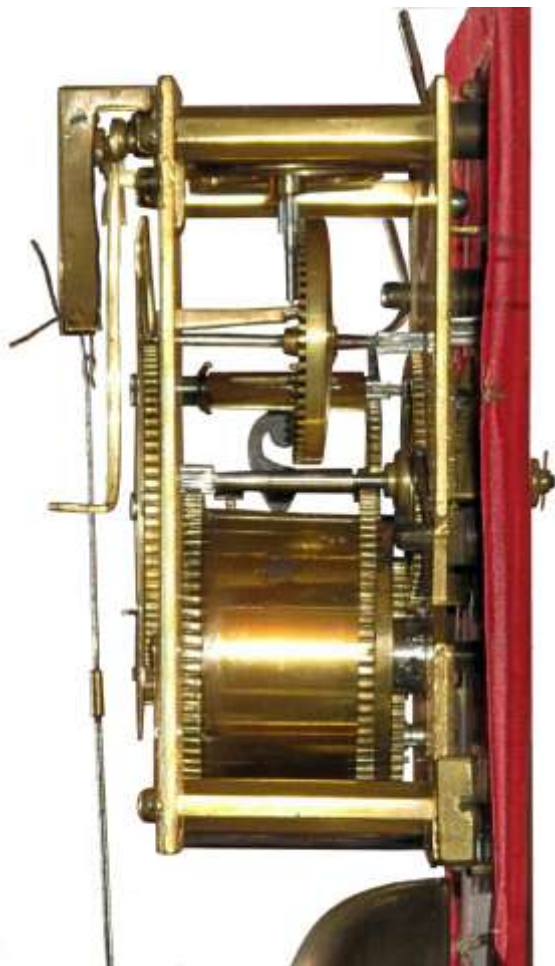
### Bell stand ø

Base 12.55 x 9.98 mm,  
tapers to 6.4 x 6.2 mm 2 Rivets.  
Height 31mm + 5.5 mm  
Five turn screw, diam.3.5 mm

### Bell ø (on Dial)

D. 70.8 mm H. 29 mm  
Thickness 2.7 mm

## Cf. COSTER'S COMPARABLE GOING TRAINS



Royal Haage Klok - Going Train

**PREPARING <MemoCosterD3>**

**COMPARABLE GOING TRAIN 1  
SALOMON COSTER, TIMEPIECE  
(PLOMP D3)** Originality not shown.



<A1V1\_D3.jpg>  
<A1V2\_D3movement.jpg>



Coster timepiece 'D3'; Views V1, V2, by courtesy of Sothebys New York.

**Train details of Coster 'D3' courtesy of  
Museum van het Nederlandse Uurwerk**

**GOING TRAIN:** <Table 4>  
Count  $70/5 \times 64/5 \times 54/60 = 161.8$  beats  
Nominal Pendulum 13.8 cm

- G4 Escape (gangrad) p.5 / 27 teeth
  - G3 Contrate (kroonrad) p.5 / 64 teeth
  - G2 Centre (centrumrad) p.8 / 70 teeth
  - G1 First (veertonrad) 72 teeth
- Note:** RH has common First and Escape

- Stop** On rear of drive wheel (G1)
- G2 Arbor Plain, NO taper or relief.
- G2 Pinion 8 Leaf, at back plate, fixed to centre wheel.

**MOTION WORK:**  
Identical to Oosterwijck's above.

<A1V3\_D3\_Cap.jpg>



Views of exceptional dovetailed barrel-cap by courtesy of Berry van Lieshout and Dr Reinier Plomp. Hour hand as advertised at discovery.

D3 hour hand



<A1V4\_D3\_hand.jpg>



<A1V5\_D3hinge.jpg>

View of the combined door-dial hinge, the box frame, and nonsequitur chapter-ring. (Mr Michiel van Hees provided this image).

~~~~~RKP~~~~~

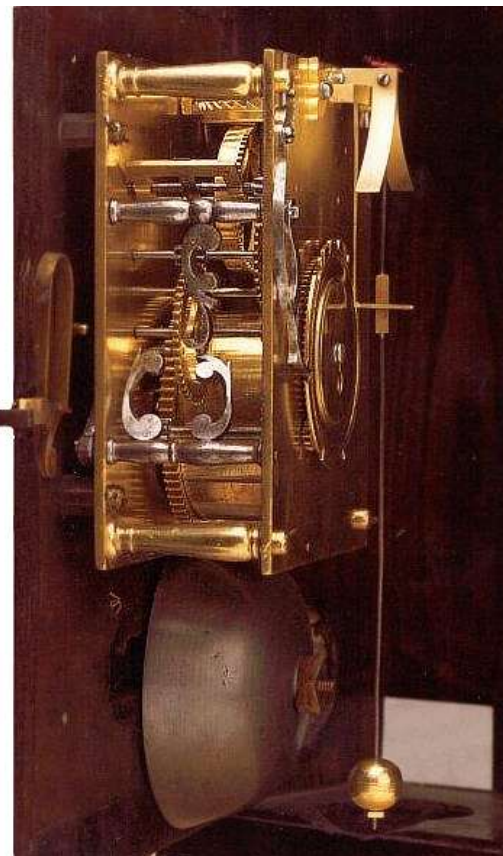
**PREPARING <MemoCosterD8>**

**COMPARABLE GOING TRAIN 2  
SALOMON COSTER, WITH STRIKE  
(PLOMP D8)** Originality not shown.

Train details and 'Views' courtesy of  
'Museum van het Nederlandse Uurwerk'.



<A1V6\_D8.jpg>



<A1V7\_D8strike.jpg>

**GOING TRAIN: <Table 5>**

Count 65/5x60/5x58/60 = 150.8 beats  
Nominal Pendulum 15.8 cm

|                          |       |          |
|--------------------------|-------|----------|
| <b>G4</b> Escape wheel   | p.5 / | 29 teeth |
| <b>G3</b> Contrate-wheel | p.5 / | 60 teeth |
| <b>G2</b> Centre-wheel   | p.6 / | 65 teeth |
| <b>G1</b> First-wheel    |       | 72 teeth |

**NB:** First and Contrate common with RH  
G2 Arbor tapers, a relief for front S1  
G2 Pinion 6 Leaf. bears centre wheel  
mounted at the back plate

**MOTION WORK:**

Identical to Oosterwijck's above, but for..  
NB. Pinion of 12 on Pinwheel (S2) arbor  
having 12 pins; being the **new** standard?

**SPLIT-BARREL:** Yes  
**Ratchet-wheel:** Yes  
Fixed onto the Barrel at front cap  
**Stop work:** (to be examined)

**STRIKE TRAIN:**

**S5** Fly (*windvleugel*) p.6 / 2 vanes  
Grimbergen suggests p.5 (originally)  
NB unreduced open centre profile (cf. RH)

**S4** Fourth (*slagrad*) p.6 / 42 teeth  
**S3** Warning (*voorslagrad*) p.5 / 48 teeth  
2 pins, domed-collet.  
**S2** Pin (*pennenrad*) p.8 / 60 teeth  
NB 12 pins with Pinion of 12 leaves  
driving centrally placed count-wheel.  
**S1** First (*Veertonrad*) 72 teeth  
planted on front of split-barrel

**Strike Gates:**

3 steel scrolls, 2 short,  
Count-wheel 12 unequal slots I to XII.  
Drive-wheel 78 teeth, Pinion of 12

**Strike Work:**

Layout and form are identical to the subject  
Royal Oosterwijck, but having **12 pins** and a  
**pinion of 12**; the ubiquitous new 'standard'.  
Whereas, and uniquely, Oosterwijck uses just  
**10 pins** with a count-wheel **pinion of 10**  
leaves, inferring an *earlier* chronology in the  
evolution of Hague clock strike-work.

**Comparing Going-trains:**

Coster escapes D3 5/27, D8 5/29  
Oosterwijck escape 5/27

Coster contrates D3 5/64, D8 5/60  
Oosterwijck contrate 5/60

**Comparing Strike-trains:**

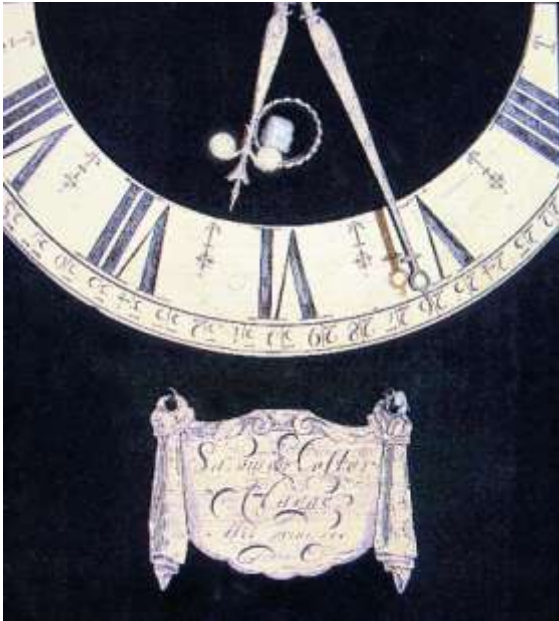
Coster D8 72-8/60-5/48-6/42-6?/Fly  
Oosterwijck RH 80-8/60-6/48-6/48-5/Fly

**Significant Pointers:**

Evidently, Hague clock wheel-trains were still  
evolving, but the close similarities here noted  
cannot be merely random. The strike counts  
suggest evolution, from Oosterwijck **RH 10's**  
to Coster and subsequent makers' use of **12**.

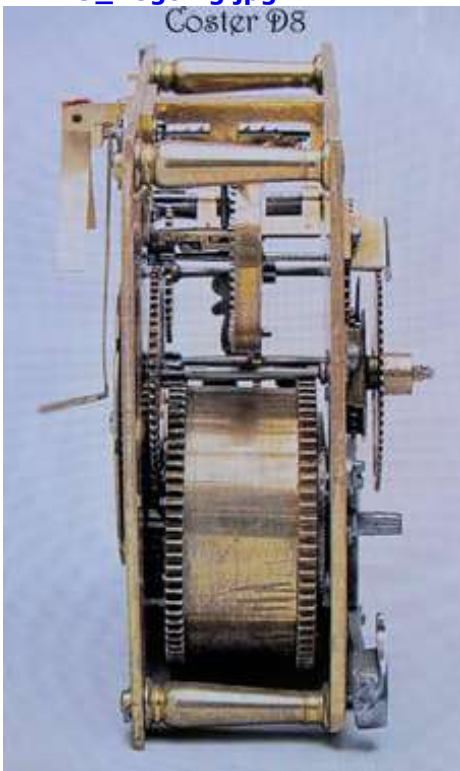
**ADDITIONAL 'VIEWS' - COSTER 'D8'.**

I am indebted to Prof.'Kees' van Grimbergen and to Mr Karel Hofland, respectively director and manager of *Museum van het Nederlandse Uurwerk, Zaandam*, for providing images and technical details of these Coster Hague clocks, being exemplary assistance to researchers.

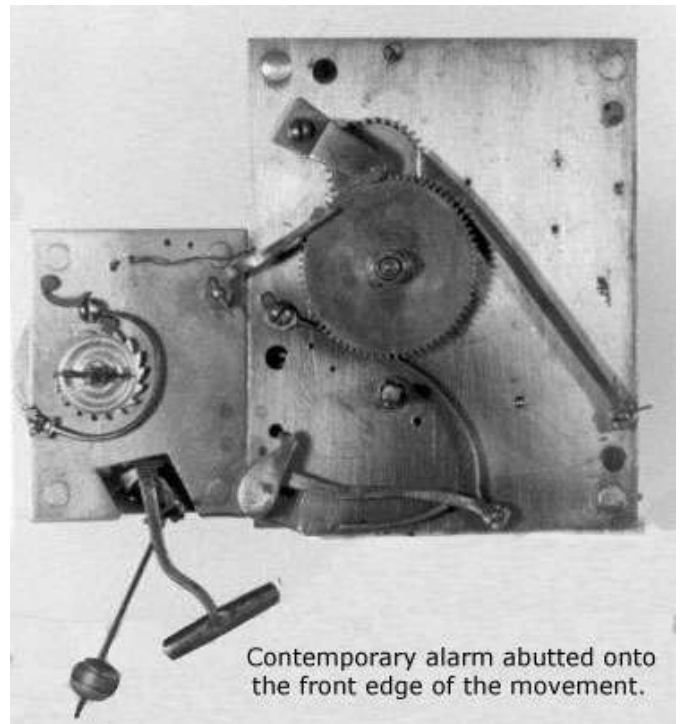


<A1V8\_D8dial.jpg>

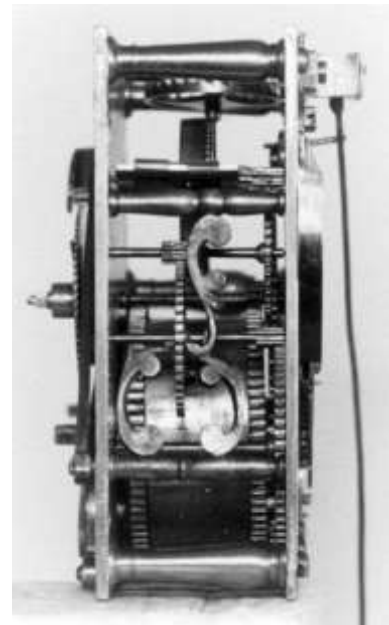
<A1V9\_D8going.jpg>



I am indebted to Mr Michiel van Hees for the additional B&W images of Coster D8 when first discovered. I am also indebted to Berry van Lieshout for documentation re. the form and components of both Coster D3 and Coster D8 immediately following their rediscovery.



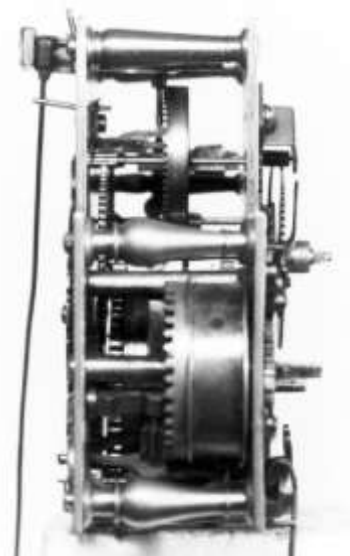
Contemporary alarm abutted onto the front edge of the movement.



<A1V11\_D8front.jpg>

<A1V10\_D8gates.jpg>

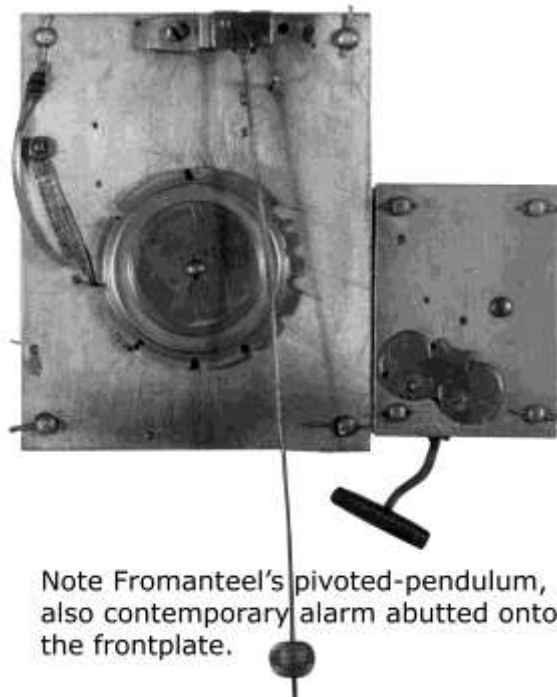
<A1V12\_D8alarm.jpg>



Coster D8

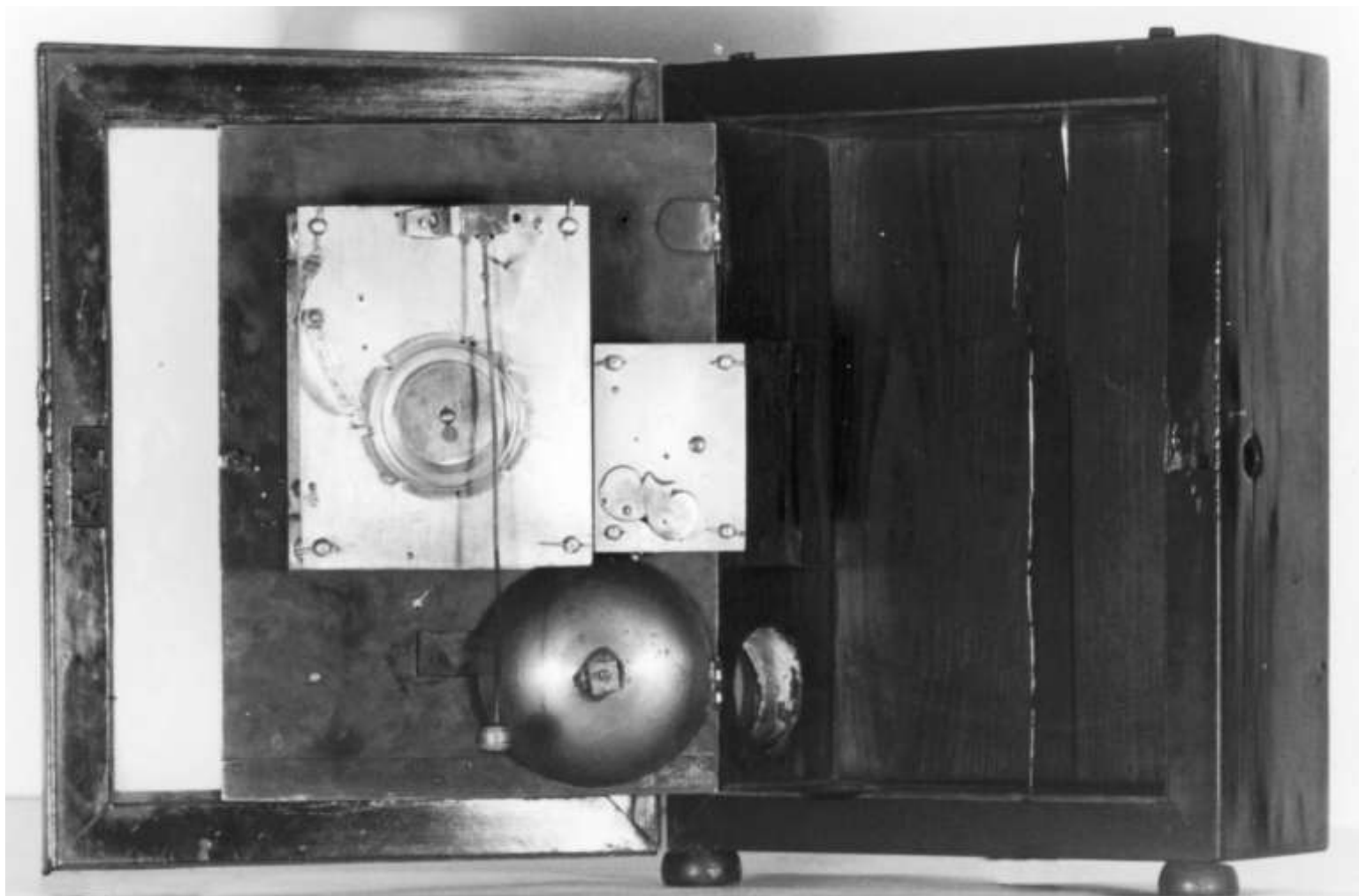


<A1V14\_D8back2.jpg>



<A1V13\_D8back.jpg>

<A1V15\_D8found.jpg>



▲ (Back to Top)    HF    ▲ (Back to RH)

**MORE PENDULUM MEMORANDA  
AT SUPPLEMENTARY VIEWS.**

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