MEMO STRYP: A Royal 'Haagseklok', App. 3, Open-Research.

A Rare Netherlandish Timepiece, signed '*J.Bernard van Stryp Anvers*', E.H.Brookes Bequest, Reg.1991.1008.1. (Ref. David Thompson, "Clocks", pp.66-67, British Museum Press, 2004; also H.Alan Lloyd, "Old Clocks", Plate 14, pp.65-68)



This general view of J.B. Van Stryp's pendulum timepiece was provided by Trustees of the British Museum, whose copyright is reserved - with consent to publish. Unless otherwise stated, all other images, unless stated as Oliver Cooke's (page 5), are the author's, taken with the Trustees' consent for the purpose of 'open research' which I have initiated under the aegis of the Dutch Horological Foundation. All image copyrights are reserved; images may not be copied nor published without the express written consent of the Trustees of the British Museum.

KP notes: J.Bernard van Stryp - Antwerp. A rare Flanders pendulum timepiece, having an early 5-wheel train, c.1660. This counter-intuitive single-hand pendulum, reading minutes, was re-inspected at the British Museum on 23-11-2009. Those present were the British Museum's David Thompson (Curator

of Horology), Oliver Cooke (Horologist), the author. The movement was not dismantled nor separated from dial or case, PhotoShop did that. The opportunity was taken to compare, directly, Severijn Oosterwijck's Royal Hague clock, having older 4-wheel trains but also with hour-strike.

SEVERIJN OOSTERWIJCK'S ROYAL 'HAAGSEKLOK'

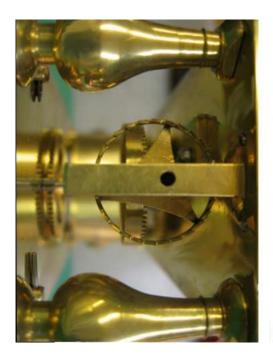
J.BERNARD van STRYP, ANVERS c.1660



General similarities in form, between these Hague and Antwerp clocks, are obvious, but the numerous technical differences only become apparent on a closer inspection of movements.

STRYP (STRIJP)• was then a village, now absorbed by the city of Eindhoven. Probably, Bernard in Antwerp and Pieter (Pierre) van Stryp in Rome, both originated from there and may be related. (•Mr.P.Th.R. Mestrom Ph.D., author of "*Uurwerken en uurwerk-makers in Limburg 1367-1850*")

Van Stryp's early five-wheel train is now recorded in new the BM's records (below). My reason for re-examination was to study its oddly mixed Anglo-Dutch features. Generally, it follows Coster's example, but it has a 5-wheel train (*Fromanteel?*), very heavy balluster (*East-like*) pillars, and its tortoiseshell also ebony veneered case has an Oak (*not Deal*) carcass being more like English box-carcasses than Coster's; whereas its *framed* backboard is typical of Coster 's cases (except **D4**),





The small size of Van Stryp's case, dial and movement is close to Salomon Coster *D1,D2*, and the plates are similar to Coster's *D3, D4, D5*, (being Dr.Plomp's chronology of the very earliest **D**utch pendulum clocks). Accomodating its newer (Fromanteel 1658?) 5-wheel train adds 18mm to give taller movement plates, laid out much like Coster D5, also with ratchet work set on back plate, (see R Ratchet B); unlike Coster's other ratchets on frontplate *D1-D4*, or barrel *D8, D10*. Escapement, crutch, cheeks, potence block, dial, latch and case all follow Coster's originals. Its door lacks a lock, having an untypical side mounted swivel hook. Unusual for early pendulums it has just one hand for hours and minutes. Dr Plomp's *characteristic properties* are met by P1 (Box), P5 (Potence Holes).

CASE: OAK Carcass, framed Backboard; H. 250 mm W. 203 mm D.103 mm

No windows, profiled frame, tortoisehell veneer, (cf.Coster **D**8, Hanet *F*5).

DIAL PLATE: H. 215 mm W. 168 mm with access hole (19.5 x 46 mm) to pendulum.

Dial-feet (4): Octagonal - pinned, D. 5.7mm L. 11.5 mm

Chapter Ring: Silver? D. 141.1 mm Anulus 24.8 mm Hours have 'zig-zag minute' scale Hand - Silver? L. 108.8 mm Radius Hour part 49.0 mm Radius Minute part 69.4 mm

MOVEMENT: Plates H. 125.8 mm W. 58 mm Thickness 2.5 mm

Pillars (4): Bold Balusters, Pinned, D. 15mm L. 44.8 mm 34.6 mm 'tween Plates

Going Barrel: Diam. 43.1 mm Length 27.4 mm

Steel Ratchet: Diam 29.2 mm 22 teeth, steel click and spring. Stop-wheel: 7 teeth Centre Arbor: L. 55.8 mm No Taper, Pinion 22, Ø 16.8 mm Wheel 78, Ø 33.1 mm Cycloid Cheeks: Round feet, Laminae 38.5 mm long. extant physical pendulum 17.1 cm.

Train: $60_{22}/78_{7}/72_{6}/70_{5}/29$ (Coster D8) = 150.79 beats/min, nominal pendulum 15.74 cm.

I was intrigued to look further into its mixed construction. All is of high workmanship, yet has only a single-hand display with sundial-like zig-zag *10-minute* scales between the Roman hours. Further inspection reveals other noteworthy features, not so far published which may have some bearing on this *movement's* proper chronology in the Anglo-Dutch-Netherlandish *oeuvre* of early Hague-type pendulums. Flanders did produce early *Hague-type* clocks, although it appears these are now rare.

NOTEABLE FEATURES, Pendulum Timepiece, "J. Bernard van Stryp Anvers";

- 1. **Stop-work** present, sited on rear barrel cap, the centre-wheel overlap being much reduced by the very large centre-pinion of 22. (When present, Coster stop-wheels are set on the front cap Coster *D3*, *D4*, never had stopwork).
- 2. **Barrel arbor** has single pinion leaf to stop-wheel. (When present, in Coster *D1*, *D2*, *D5* all have a stop driving pin set into the arbor; *D5* had '*Reijnaert*' pinion of report).
- 3. **Motion work and bridge** are unnecessary, centre arbor holds the only hand.
- 4. **Ratchet Wheel**, circumfrential spring and single click are all of steel, sited on the back plate (like Coster *D5* alone), all finely made and nicely detailed; the ratchet is set on squared barrel arbor, held by a pin through integral domed collet, its spring and single click are each fastened with screws (not pins).
- 5. **Five-Wheel Train,** I believe originated in England, with Fromanteel or East?
- *G5* 5/29, Escape -*gangrad*, (Ø 22.5mm), 3-spokes, domed collet above the pinion, unringed, no marking out observed, sharp teeth, [Query?]
- *G4* 6/70, Contrate- *kroonrad*, (Ø 26.7 mm), unringed, hand cut, odd pinion, Dome-collet to front, (D2-D4 ogee/front, D1-D3 square/rear, D5 domed/rear)
- G3 7/72, Intermediate -tussenrad, (Ø 29.7 mm), pinion of 7 (cf. **D**4), collet.
- **G2** 22/78, Centre -*centrumrad*, (Ø 33.1mm), untypical high pinion count, unique octagonal steel collet at front of oversized pinion, arbor untapered.
- *G1* Barrel Wheel *-veertonrad*, (Ø 50 mm, 60), at rear of barrel with untypical low number, (cf. 1658 Fromanteel 60; Oosterwijck RH and all Costers 72).
- 6. **Suspension Cheeks** have untypical round cocks (cf. Oosterwijck RH), but widely splayed well beyond '*cycloid'* form; (parodies; or later reshaping?)
- 7. **Verge cock** to right, untypical bi-fid foot, with a straight arm to the verge pivot. (Coster *D3* has tri-fid foot, to right; Oosterwijck RH has angular foot, to left).
- 8. **Engraved 'lambrequin'** (Stryp's name shield) flanked by Porpoises closely matches Severijn Oosterwijck's designs, (see "Huygens Legacy", nr.11, p.34, in repousee; also engraved, see Dr.R.Plomp, "Spring-driven Dutch pendulum clocks 1657-1700" p.178). Repousee, usually, is derived from the engraved, perhaps a common source inspired both clockmakers, or a single engraver?
- 9. **Potences** both upper and lower potences on cocks being internally screwed into the backplate, (cf. *D3*, *D4*), the upper potence has two screws, the lower a single screw with steady pins (group of 3 holes is visible on the back plate).
- 10. **Pillars** untypical thick balusters, Diam.15mm, spaced 34.6mm ('*Horologium' gives "1.5 inches"* spacing), pinned at the back plate. Pillarhead rivets are shown at page 5.
- Dialplate is made of brass, covered in old deep maroon velvet, set off by silver hand, chapter-ring and signature plate, all finely engraved.
- 12. **Chapter ring** 141 mm diameter/ 25 mm anulus is smaller than most Coster clocks, having an inner line with Quarters scribed, half-hours are a scored to *quatre-foils*, single minutes unmarked; extrapolated by reference to 10-minute divisions by
- 13. 5-minute sundial-like zig-zags. (Thompson 2004 p.66 gives 'minutes')
- 14. **Hour Hand is Silver**, engraved, lobed trefoil pointer derived Coster, no collet.
- 15. **Dial-feet** to tall movement are octagonal, just 6 mm long (like Coster *D4*).
- 16. **Dial Pivots** fixed behind the dial, the lower plate with steady-pins and screw.
- 17. **Box Case** veneered in ebony with tortoiseshell veneered moulded door.
- 18. **Backboard** also **Box-carcass** are entirely of OAK, (only Coster D4 has OAK backboard but DEAL carcass); spikes stop case displacement when winding.
- 19. **Backboard** is framed by its box like all Coster cases, (excepting **D4**).
- 20. **Door Hinges** under ebony veneers, no internal rebate needed for hinge posts.
- 21. **'Ophangers' -** round iron loops screwed well into the case, showing no stalk.
- 22. **Early credentials** are also confirmed by case features: windowless box case (P1), smaller than all but one of Coster's (Science Museum's *D4*), its frontal elevations are slightly smaller than Oosterwijck's **earlier** RH, but 1.05 cm deeper (incl.door profile).







Compare, Coster "D5" also Oosterwijck "Lieberge"

"A Royal Haagseklok" cites the unknown originator who first combined a going-barrel with stop work, and the likelyhood this innovative mechanism was not Salomon Coster's but was a device obtained through negotiation, possible being the 'secreet' in the September 1657 Contract. So here I am unsurprised to discover another early pendulum maker, and one probably never licensed by Huygens nor Coster, also using a ubiquitous going-barrel, having its arbor fitted with developed pinion-leaf and stop-work. Such evidence lends support to my hypothesis (Perspective), and may well infer an English influence that is similarly evidenced by Oosterwijck's Royal Haagseklok.



Comparing Backboards: Oosterwijck *RH* full span: Van Stryp framed.

Professional Horologists may form a view on this new data, and perhaps relate certain features to Coster's or Fromanteel's pendulum *oeuvres*. However, my observations justify "open-research", to establish more complete data for new studies of early pendulum evolutions and chronologies.

Supplementary Views taken by **Oliver Cooke** ©, courtesy of Trustees of the British Museum. For research purposes, any image may be had in higher-resolution, by application.

Oblique of Suspended Movement



Brass Dialplate with Movement demounted (Compare Oosterwijck *RH* and late Costers)



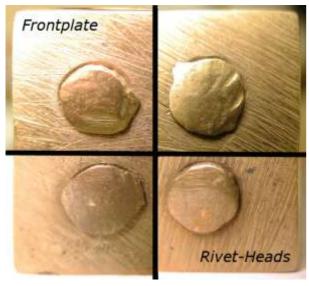


Plate Frontplate (details): showing the unpolished file-marked plate and unfinished rivet-heads to pillars



Engraved Dolphin Signature

Compare Severijn Oosterwijck's use of Dolphins; Plomp, "Pendulums", p.178 - being also **engraved**, "Huygens Legacy", p,34, (Plomp D9) **repoussé**.

OTHER PENDULUM MEMORANDA AVAILABLE AT SUPPLEMENTARY VIEWS

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