## DIARY 2015

ANTIQUE HOROLOGY \& BAROMETERS


THE HOROLOGICAL FOUNDATION


DIARY 2015<br>ANTIQUE HOROLOGY \& BAROMETERS

## With Compliments

$\qquad$
$\qquad$


THE HOROLOGICAL FOUNDATION
The Horological Foundation is a non-profit organisation. Through its internet sites it aims to provide a meeting and mediation plaza for anyone interested in important antique horological objects, instruments and barometers.

Association sans but lucratif basée à Maastricht. Par ses sites Internet elle vise à fournir un espace de réunion et de médiation pour toute personne intéressée aux objets d'horlogerie importants et aux baromètres anciens.

## 2014

## 2016

## january



## jex



february

august

|  | Mo tU WE TH FR SA |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31 |  |  |  |  |  |  |  |
| 32 |  | 5 | 6 | 7 |  |  | 9 |
| 33 | 11 | 112 | 13 | 14 | 15 |  | 6 |
| 34 | 18 | 19 | 20 | 21 | 22 |  |  |
| 35 |  | 26 | 27 | 28 |  |  |  |


march

## september

 $\begin{array}{lllllll}8 & 9 & 10 & 11 & 12 & 13 & 14\end{array}$ $\begin{array}{lllllll}15 & 16 & 17 & 18 & 19 & 20 & 21\end{array}$ \begin{tabular}{l|lllllll}
39 \& 22 \& 23 \& 24 \& 25 \& 26 \& 27 \& 28

 

40 \& 22 <br>
29 \& 30
\end{tabular}

остове

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\begin{array}{l|llllll}
43 & 20 & 21 & 22 & 23 & 24 & 2 \\
44 & 27 & 28 & 29 & 30 & 31
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\begin{aligned}
& \begin{array}{c|rrrrrrr}
40 & 1 & 2 & 3 & 4 & 5 \\
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43 & 20 & 21 & 22 & 23 & 24 & 25 & 26
\end{array}
\end{aligned}
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may


## june

| WK | Mo | tu | WE | th | FR | SA | su |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 44 |  |  |  |  |  | 1 | 2 |
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| 46 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 47 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 48 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |

## december

| WK | MO | TU | WE | TH | FR | SA | SU |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 22 |  |  |  |  | 1 |  |  |
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| 25 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 26 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | | 49 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
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| 50 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 51 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |

22
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WK Mo tu we th fr sa su wK mo tu we th fr sa su $\left.2 \begin{array}{rrrrrr}1 & 2 & 3 & 4 & 5 & 48\end{array} \right\rvert\,$\begin{tabular}{lll}
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26 \& $27 \quad 28 \quad 29 \quad 30$
\end{tabular}

## 2015

## JANUARY

Mo tU we th fr sa su | 5 | 6 | 7 | 1 | 2 | 3 | 4 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | $\begin{array}{rrrrrrr}12 & 13 & 14 & 15 & 16 & 17 & 18\end{array}$ $\begin{array}{lllllll}19 & 20 & 21 & 22 & 23 & 24 & 25\end{array}$ $\begin{array}{llllll}19 & 20 & 21 & 22 & 23 & 24 \\ 26 & 27 & 28 & 29 & 30 & 31\end{array}$

## february

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## MARCH

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$\begin{array}{ll}27 & 28 \\ 29 & 30\end{array}$

## MAY

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11 & 12 & 13 & 14 & 15 & 16 & 17 \\
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\end{array}
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MO TU WE TH FR SA SU
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$\begin{array}{lllllll}22 & 23 & 24 & 25 & 26 & 27 & 28\end{array}$
2930

2015

## july

## MO TU WE TH FR SA SU

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aUGUST
mo tU we th fr sa su
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$\begin{array}{rrrrrrr}10 & 11 & 12 & 13 & 14 & 15 & 16\end{array}$ $\begin{array}{lllllll}17 & 18 & 19 & 20 & 21 & 22 & 23\end{array}$ $\begin{array}{lllllll}24 & 25 & 26 & 27 & 28 & 29 & 30\end{array}$ 31

## September

MO TU WE TH FR SA SU

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1 & 2 & 3 & 4 & 5 & 6
\end{array}
$$

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\begin{array}{rrrrrrr}
7 & 8 & 9 & 10 & 11 & 12 & 13
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\begin{array}{lllllll}
14 & 15 & 16 & 17 & 18 & 19 & 20
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\begin{array}{lllllll}
14 & 22 & 23 & 24 & 25 & 26 & 27
\end{array}
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\begin{array}{lll}
21 & 22 & 20 \\
28 & 29 & 30
\end{array}
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## остовеR

$\begin{array}{llllll}26 & 27 & 28 & 29 & 30 & 31\end{array}$

## november

MO TU WE TH FR SA SU
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$\begin{array}{lrrrrrr}9 & 10 & 11 & 12 & 13 & 14 & 15\end{array}$
$\begin{array}{lllllll}16 & 17 & 18 & 19 & 20 & 21 & 22\end{array}$
$\begin{array}{lllllll}23 & 24 & 25 & 26 & 27 & 28 & 29\end{array}$ 30

## december

Mo tu we th fr sa su
$\begin{array}{llllll}1 & 2 & 3 & 4 & 5 & 6\end{array}$
$\begin{array}{lllllll}7 & 8 & 9 & 10 & 11 & 12 & 13\end{array}$
$\begin{array}{lllllll}14 & 15 & 16 & 17 & 18 & 19 & 20\end{array}$
$\begin{array}{lllllll}14 & 15 & 16 & 17 & 18 & 19 & 20 \\ 21 & 22 & 23 & 24 & 25 & 26 & 27\end{array}$
$\begin{array}{llll}21 & 22 & 23 & 24 \\ 28 & 29 & 30 & 31\end{array}$

## English Lantern Clocks

## By Brian Loomes

$\square$he name 'Lantern' has been suggested to be a corruption of latten' from the French laiton (brass). However and despite this ingenious suggestion no example of either word -latten or lantern- is known at the time of their making.
They began to be made in England about the year 1600. The earliest examples were often unsigned but these clocks increasingly bore a maker's signature and location, often including his address'. They had a single hand which indicated hours and half hours and quarter hours, a method of time indication which continued as long as lantern clocks were made.
Prices for new clocks. The best guess would be a little as $£ 2.50$ by the 1650 s but a more typical price was $£ 3.50$ by the 1690 s for a verge pendulum version or $£ 3.25$ for a balance wheel type.


1. A balance wheel lantern clock of about 1600 by Robert Harvey (15801615) of the Little Britain district of London. He was the earliest Englishborn maker of these clocks, whose work we know to survive.

Inaccurate. The first lantern clocks were regulated by a balance wheel conbalance whe were inaccurate, their timekeeping often varying by plus or minus fifteen minutes a day. The only way to make the lock run faster or slower was to add to, or reduce, the driving weight, done by adding or removing lead hot or shims from the cupped top of the weight They normally struck the hour on a large bell. One right drowe the timeke ing section of the weight drove Sill the clock nd another the striking Some additionally had alarmwork, which could be set or not at will.

2. A continental chamber (lantern?) clock on an early 17 th c. 'ethics emblem' of an old man's ongoing burdens. Print and proverb by Adriaen van de Venne and Jacob Cats.

Pendulum accuracy. The short verge pendulum (with adjustable length for time regulation) was introduced to clockwork in England about 1658 or a little earlier, it is believed by Ahasuerus Fromanteel the grandson of immigrants from Flanders. At first the pendulum was known as a 'regulator'. This brought improved time keeping to within a minute or less a day but was slow to be adopted in lantern clocks. Many continued to be made with balance wheel control as late as the 1680 s and later. It was slightly cheaper, less fussy about being setup level and extreme accuracy was not vital for this type of clock.
Square dials. After about 1680 a few lantern clocks were made with square dials (fig 4.), resembling those of longcase clocks, which by now were well established in the public mind, though the square dial
antern clocks were still hung from he wall. The arched dial longcase appeared about 1700 , after which some lantern clocks adopted arched dials too. Arched dials with alarmwork seem to have been especially popular in London, perhaps intended for the servants' quarters of grand houses. Most were of standard size but some were made as miniatures ( 9 inches -23 cm ) and miniatures are very popular with collectors.
3. Some were housed in long 'pencil slim' wooden cases to enclose the ropes and weights from children and to keep the clock the required height
from the ground. This fashion was not likely to pre-date the first longcase clocks in 1658.

Traditional lantern clocks fell from favour in London by about 1700, though the arched dial type, often with alarmwork, continued through till mid century and later. In the provinces the traditional lantern clock was made for another half century or more, particularly in the rural counties of the East and South.

FURTHER READING: LANTERN CLOCKS AND THEIR MAKERS. SEE PAGE I74.


This was probably because they were cheaper than longcase clocks and more easily afforded by the less prosperous rural population. In these regions the traditional lantern clock was still made as late as the 1750 s, though by the 1760 s it was pretty well extinct.
4. Anonymous squar dial lantern clock of about 1680 originally with verge pendulum. The alarm is set by a rotating alarm disk and the tail of the hour hand.



1. Made before the Civil War 2. During the Civil War, 1642-51 3. After the Civil War.

> 5. Arched dial lantern clock of about 1730 by Edward Hunsdon of Chelmsford, Essex, with long pendulum.

Long pendulum. By the 1690 s some lantern clocks were made with anchor escapement and long pendulum. But the short, verg pendulum form persisted in man antern clocks long after the more accurate long pendulum was standard on longcase clocks. The eason was probably because th erge pendulum because the e r mack wa ong pendulum for accuracy of the vore and the dequate for quate for a clock showing quarter hours by a single hand

After all, there was little need to count minutes for 18th c. rural households.

ABOUT THE AUTHOR: WWW.BRIANLOOMES. COM

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SOUTHERN NETHERLANDS
Tabernacle clock with travelling case, c. 1560 . Height: 18 cm .
SCAN QR-Code or See picture notes for more details on this object


HENRI CAPT-AUBERT GENEVA
A pair of gold bangles, c. 1830.
scan Qr-code or see picture notes for more details on this object


$$
9 \text { Tuesday }
$$

10 Wednesday

## 11 Thursday

## 12 Friday

## 13 Surutay

[^0]$\frac{\text { www.antique-horology.org }}{17}$


15 Monday

 $\begin{array}{lllllllll}51 & 15 & 16 & 17 & 18 & 19 & 20 & 21 \\ 52 & 22 & 23 & 24 & 25 & 26 & 27 & 28\end{array}$ | 52 | 22 | 23 | 24 | 25 | 26 | 27 | 2 |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 29 | 30 | 31 |  |  |  |  |

$$
16^{\text {Tuesday }}
$$

- international fair (new york) • international fair (natrden)

17 Wednesday

## $18^{\text {Thursday }}$

19 Friday

## 20 Saturday

## LARCUM KENDALL LONDON

Marine timekeeper, dated 1774. Height: 7.5 cm

## 21 Sunday

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JAPAN
Small Japanese lantern clock, c. 1800. Height: 20.5 cm .

$30^{\text {Tuesday }}$

31 Wednessay

1 Thursday * new year's day

2 Friday * rus

3 Saturday * milad un nabi isL * rus

4 Sunday * rus


GENEVA
Gold novelty watch, c. 1815. Diameter: 49 mm .
SCan QR-Code or see picture notes for more details on this object

5 Monday * rus wK $\begin{array}{llllllll}2 & 5 & 6 & 7 & 8 & 9 & 3 & 10\end{array}$ \begin{tabular}{l|llllllll}
3 \& 12 \& 13 \& 14 \& 15 \& 16 \& 17 \& 1 <br>
4 \& 19 \& 20 \& 21 \& 22 \& 23 \& 24 \& 25 <br>
5 \& 26 \& 27 \& 28 \& 29 \& 30 \& 31 \&

 

4 \& 19 \& 20 \& 21 \& 22 \& 23 \& 24 <br>
5 \& 26 \& 27 \& 28 \& 29 \& 30 \& 31
\end{tabular}

HRH Jean I former Grand Duke of Luxembourg (r921) HRH Juan Carlos I former King of Spain (r938)
6 Tuesday * ebiphany (3 könige) $*$ christmas day chr. orth • rus

7 Wednesday * rus

## 8 Thursday

Prince Vincent of Denmark (20ir) Princess Josephine of Denmark (20ir)

## 9) Friday

Catherine Duchess of Cambridge (1982)
$10^{\text {Saturday }}$

11 Sunday


ZACHARIE RAINGO PARIS
Tellurion clock, c. 1810-15. Height: c. 54.5 cm .
SCAN QR-Code or see picture notes for more details on this object

12 Monday

 $\begin{array}{llllllll}3 & 12 & 13 & 14 & 15 & 16 & 17 & 18\end{array}$ \begin{tabular}{l|lllll}
4 \& 19 \& 20 \& 21 \& 22 \& 23 <br>
\hline

 

4 \& 19 \& 0 \& 21 \& 22 \& 23 <br>
5 \& 26 \& 27 \& 28 \& 29 \& 30 <br>
31
\end{tabular}

$13^{\text {Tuesday }}$

14 Wednesday

## $15^{\text {Thursday }}$

Iñaki Urdangarín y Liebaert, Duke of Palma de Mallorca (1968)
16 Friday
$17^{\text {Saturday }}$

## 18 Sunday



## $20^{\text {Tuesday }}$

HRH Sophie Countess of Wessex née Rhys Jones (1965) HM Queen Mathilde of Belgium née Jonkvrouwe d'Udekem d'Acoz (1973)
21 Wednesday

HRH Ingrid Alexandra Princess of Norway (2004)
22 Thursday

- american int. fine art fair (palm b.) • kunst \& antiek weekend (naarden)
$23^{\text {Friday }}$ - american int. fine art fair - kunst \& antiek (naarden)

HSH Caroline Princess of Monaco (1957)
24 Saturday

25 Sunday


RUNDELL \& BRIDGE LONDON
Gold oval watch, c. 1820. Larger diameter: 60 mm .
sCan Qr-code or see picture notes for more details on this object


| $26 \text { Monday }$ | * aus | brafa (brussels) | $\begin{array}{c\|ccccccc} \text { WK } & \text { Mo } & \text { TU } & \text { WE } & \text { TH } & \text { FR } & \text { SA } & \text { SU } \\ 1 & & & & 1 & 2 & 3 & 4 \\ 2 & 5 & 6 & 7 & 8 & 9 & 10 & 11 \\ 3 & 12 & 13 & 14 & 15 & 16 & 17 & 18 \\ 4 & 19 & 20 & 21 & 22 & 23 & 24 & 25 \\ 5 & 26 & 27 & 28 & 29 & 30 & 31 & \end{array}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

27 Tuesday -brafa (brussels)

28 Wednesday

- brafa (brussels)


## 29 Thursday

- brafa (brussels)

Wedding anniversary of HSH Prince Maximilian of Liechtenstein and Angela Brown (2000)
30 Friday

- brafa (brussels)

HM Abdullah II bin Hussein King of Jordan (1962) HM Felipe VI King of Spain (1968)
HRH Hashem Prince of Jordan (2005) HRH Hashem Prince of Jordan (2005)
31 Saturday * chi •brafa (brussels)

HRH Beatrix Princess of the Netherlands (1938)
1 Sunday $*$ chi brafa (brussels)

| www.antique-horology.org | 31 |
| :--- | :--- |



CLAUDE GALLE PARIS
French Empire pendule，c．1810．Height： 52 cm

##  <br> 登处場 <br> 

2 Monday $*$ mex $\cdot$ chi $\bullet$ american int．fine art fair（palm b．）

5 MO TU WE TH FR SA St $\begin{array}{lllllllll}6 & 2 & 3 & 4 & 5 & 6 & 7 & 8\end{array}$ | 8 | 16 | 17 | 1 | 1 | 19 | 19 | 21 | 21 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 9 | 23 | 24 | 25 | 26 | 27 | 28 |  |  |  |

Wedding anniversary of HRH The Prince of Orange and Máxima Zorreguieta（2002）
3 Tuesday

HSH Angela Princess of Liechtenstein née Brown（1958）
4 Wednesday

## 5 Thursday

HRH Mary Crown Princess of Denmark née Donaldson（1972）
6 Friday

HRH Marie Princess of Denmark née Cavallier（1976）HRH Louise Princess of Belgium（2004）

## 7 Saturday

8 Sunday


ROGER DUNSTER AMSTERDAM
An ebony-veneered spring-driven bracket clock, c. 1735 . Height: 55 cm . sCan Qr-code or see picture notes for more details on this object
c) Monday

 \begin{tabular}{c|cccccccc}
6 \& 2 \& 3 \& 4 \& 5 \& 6 \& 7 \& 8 <br>
7 \& 9 \& 10 \& 11 \& 12 \& 13 \& 14 \& 15

 

8 \& 16 \& 17 \& 18 \& 19 \& 20 \& 21 <br>
9 \& 23 \& 24 \& 25 \& 26 \& 27 \& 28
\end{tabular}

$10^{\text {Tuesday }}$

11 Wednesday

## 12 Thursday

13 Friday

## 14 Saurday

HSH Hans Adam II Reigning Prince of Liechtenstein (1945) Wedding anniversary of HRH Henri Grand Duke of Luxembourg and解

15 Sunday
WWW.antique-horology.org


C F SUEDOIS ANGERS
A French lantern clock, c. 1650. Height: 23 cm .

| 6 Monday | * USA | - palm beach jewellery art \& antiques show | 5 <br> 6 <br> 7 <br> 8 |  | 16 | 3 0 7 | 4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | $\begin{array}{llllllll}8 & 16 & 17 & 18 & 19 & 20 & 21 & 22 \\ 9 & 23 & 24 & 25 & 26 & 27 & 28\end{array}$

RH Alexandra Princess of Luxembourg (1991)
17 Tuesday - palm beach jewellery art \& antiques show
19 Thursday

$\qquad$

HRH Prince Andrew The Duke of York (1960)
20 Friday

21 Saturday

HM Harald V King of Norway (1937) HIH Amedeo Archduke of Austria-Este, Prince of Belgium (1986)
22 Sunday



HIH Naruhito Crown Prince of Japan ( 1960 )
24 Tuesday

25 Wednesday
$26^{\text {Thursday }}$

ARH Ernst August Prince of Hannover (1954)
27 Friday

28 Saturday

## 1 Sunday

2 Monday * lent monday orth ${ }^{\text {wK }}$ Mo tu we ther se sa su $\begin{array}{lllllllll}10 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\ 1 & 0 & 10 & 1 & 1 & 13 & 14 & 15\end{array}$ $12 \quad 16 \quad 17$ $\begin{array}{llllllll}10 & 1 & 18 & 19 & 20 & 21 & 2 \\ 23 & 24 & 25 & 26 & 27 & 28 & 2\end{array}$ 3031

3 Tuesday

4 Wednessay

5 Thursday

6 Friday

7 Saturday

8 Sunday


## $10^{\text {Tuesday }}$

HRH Edward The Earl of Wessex (1964)
11 Wednesday

## $12^{\text {Thursday }}$

Prince Gabriel de Nassau (2006)
13 Friday

14 Saturday

- tefaf (mastricht)

HSH Albert II Prince of Monaco (1958)
15 Sunday

- tefaf (mastricht)
HSH Constantin Prince of Liechtenstein (1972)
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| WEEK 12 |  |  | MARCH |
| :---: | :---: | :---: | :---: |
| 16 Monday | * mex | - tefaf (maastricht) |  |
| 17 Tuesday |  |  | - tefaf (manstricht) |
| 18 Wednesd |  |  | - tefaf (manstricht) |

19 Thursday ${ }^{1}$-tefaf (mantricht)

Wedding anniversary of HRH Elena Infante of Spain and Jaime de Marichalar y Sáenz de Tejada (1995)
20 Friday $\quad$ tefaf (maAstricht)
21 Saturday * RSA•JAP - tefaf (maAStricht)

SCan Qr-code or see picture notes for more details on this object


GEORG ROLL AND JOHANN REINHOLD AUGSBURG


HRH Princess Eugenic of York (1990)
24 Tuesday

25 Wednesday * GRE

Philipp von Lattorff (1968)
26 Thursday

Luana Countess van Oranje-Nassau, Jonkvrouw van Amsberg (2005)
27 Friday

## 28 saurdy

## 29) Sunday



[^1]1 Wcdncsdy

2 Thusday

HRH Sirindhorn Princess of Thailand (1955)
3 Friday *os


5 Sunday * ustre oxy cant *om
Astronomical table regulator, c. 1810 . Height: c. 70 cm .
sCan Qr-code or see picture notes for more details on this object


 \begin{tabular}{r|rrrrrrr}
14 \& \& 1 \& 2 \& 3 \& 4 \& 5 <br>
15 \& 6 \& 7 \& 8 \& 9 \& 10 \& 11 \& 12 <br>
16 \& 13 \& 14 \& 15 \& 16 \& 16 \& 17 \& 18 <br>
\hline

 $\begin{array}{lllllllll}16 & 13 & 14 & 15 & 16 & 17 & 18 & 19 \\ 17 & 20 & 21 & 22 & 23 & 24 & 25 & 26\end{array}$ 

17 \& 20 \& 21 \& 22 <br>
18 \& 27 \& 28 \& 29 <br>
\hline
\end{tabular}

7 Tuesday

Jaime de Marichalar y Sáenz de Tejada, Duke of Lugo (1963)
8 Wednesday

## Leah Isadora Behn (2005)

## 9 Thursday

## 10 Friday $\quad *$ good friday chri

Wedding anniversary of HIM Akihito Emperor of Japan and Michiko Shôda (1959) Tatjana von Lattorff née Princess of Liechren ein (1073) HRH Ariane Princess of the Nerherlands (2007)

11 Saturday

## SIMON DE CHARMES LONDON

Walnut spring-driven bracket clock, c. 1730 . Height: 39 cm
scan Qr-code or see picture notes for more details on this object

14 Tuesday

- art bred

| 15 Wednesday | - art breda |
| :---: | :---: |
| HM King Philippe of Belgium (1960) |  |
| $16 \text { Thursday } \quad * \text { UsA }$ | - art breda |
| HM Margrethe II Queen of Denmark (1940) HRH Henri Grand Duke of Luxembourg (1955) (1992) HRH Eléonore Princess of Belgium (2008) | HRH Sébastien Prince of Luxembourg |
| $17 \text { Friday }$ | - art breda |
| 18 Saturday | - art breda |
| Sayako Kuroda née Princess of Japan (1969) |  |
| 19 Sunday | - art breda |
|  |  |
| www.antipue-horology.org | 53 |


J. P. DUPONT \& ZOON ROTTERDAM

A marine chronometer, c. 1875-80. Height: 19 cm . scan or-code or see picture notes for more detalls on this obiect $\begin{array}{llllllll}16 & 13 & 14 & 15 & 16 & 17 & 18 & 19\end{array}$ $\begin{array}{lllllll}17 & 20 & 21 & 22 & 23 & 24 & 1 \\ 18 & 27 & 28 & 29 & 30 & 30\end{array}$

## $23^{\text {Thusdady }}$

HIH Laeritia Maria Archduchess of Austria-Este, Princess of Belgium (2003)
24 Friday

$$
25 \text { saurdy }
$$

26 sumay



CORNELIUS LERB REGENSBURG
A German spring-driven bracket clock, c. 1735. Height: 55 cm .
sCan Qr-Code or see picture notes for more details on this object

2 Saturday

3 Sunday




JOSEPH HURT LONDON

English diagonal barometer, c. 1740 . Height: 93 cm ; width: 79 cm . SCan Qr-code or see picture notes for more details on this object

## 



HH Henrik Prince of Denmark (2009)

```
\[
5 \text { Tuesday } \quad *_{\text {JaP }} \cdot \operatorname{mex}
\]
```

6 Wednesday

## 7 Thursday

## 8 Friday * *rA

HRH Crown Prince Moulay Al-Hassan of Morocco (2003)

$$
\text { 9) Saturday } \quad * \text { RUS }
$$

## 10 Sunday



11 Monday

 \begin{tabular}{r|rrrrrrr}
19 \& 4 \& 5 \& 6 \& 7 \& 8 \& 9 \& 10 <br>
20 \& 11 \& 12 \& 13 \& 14 \& 15 \& 16 \& 17

 

21 \& 18 \& 19 \& 20 \& 21 \& 22 \& 23 \& 24 <br>
22 \& 25 \& 26 \& 27 \& 28 \& 29 \& 30 \& 31
\end{tabular}

## $12^{\text {Tuessay }}$

13 Wednesday

14 Thursday * den •aut * ascension chr.

Wedding anniversary of HM Juan Carlos I King of Spain and HRH Sofia Princess of Greece and Denmark (1962) Wedding anniver ary of HRH Crown Prince Frederik of Denmark and Mary Donaldson (2004)

15 Friday

Zara Phillips (1981)
$16^{\text {Saurday }}$

HSH Maximilian Prince of Liechtenstein (1969)
17 Sunday


LEPAUTE PARIS

$$
\text { An unusual pendule d'officier, c. } 1800 \text {. Height: } 34 \mathrm{~cm}
$$

ar or-code or see picture notes for more details on this obiect
$\qquad$

18 Monday
 $\begin{array}{llllllllll}20 & 11 & 12 & 13 & 14 & 15 & 16 & 17 \\ 21 & 18 & 19 & 20 & 21 & 22 & 23 & 2\end{array}$ $\begin{array}{llllllll}21 & 18 & 19 & 20 & 21 & 22 & 23 & 24 \\ 22 & 25 & 26 & 27 & 28 & 29 & 30 & 31\end{array}$

HSH Alfons Prince of Liechtenstein (2001) HSH Benedikt Prince of Liechtenstein (2008

## $19^{\text {Tuesday }}$

Wedding anniversary of HRH Constantijn Prince of the Netherlands and Laurentien Brinkhorst (2001)
20 Wednesday

## 21 Thursday

22 Friday

Wedding anniversary of HM Felipe King of Spain and Letizia Ortiz Rocasolano (2004)
23 Saturday

24 Sunday * whitsun pentecost chri * shavout ist day jew

Wedding anniversary of HRH Prince Joachim of Denmark and Marie Cavallier (2008) HSH Joseph Wenzel
Prince of Liechtrenstein (1995) Wedding anniversary of Ari behn and Mar
Prince of Liechtenstein (1995) Wedding anniversary of Ari Behn and Märtha Louise Princess of Norway
$(2002)$
WWW.Antique-horology.org

HRH Laurentien Princess of The Netherlands née Brinkhorst (1966)

$$
26^{\text {Tuesday }} \quad * \text { orir }
$$

$\qquad$
27 Wednesday
$\qquad$
28 Thursday
$29^{\text {Friday }}$
$30^{\text {Saturday }}$

31 Sunday

64


JOHN EBSWORTH LONDON
Quarter-striking lantern clock, c. 1700. Height: 40 cm . SCan Qr-Code or see picture notes for more details on this object



LOUIS BAUSSE PARIS
Terracotta Empire clock, c. 1805. Height: 50.5 cm . sCan Qr-code or see picture notes for more details on this object



Andrea Casiraghi (1984) Eloise Countess van Oranje-Nassau, Jonkvrouwe van Amsberg (2002)
9 Tuesday olympia (london)
Wedding anniversary of HiH Naruhito Crown Prince of Japan and Masako Ôwada (1993)
10 Wednesday

HM Fabiola Queen-Dowager of Belgium, née de Mora y Aragón (1928) HRH Henrik Prince of Denmark, Comte de Laborde de Monpézat (1934) HSH Alois Hereditary Prince of Liechtenstein (1968)

12 Friday * rus

13 Saturday
$\frac{\text { HRH Cristina Infante of Spain, Duchess of Palma de Mallorca (1965) }}{14 \text { Sunday }}$

| www.antioue-horology.org | 69 |
| :--- | :--- |



17 Wednesday

$$
18 \text { Thursday } \quad \text { * RAMADAN ist day isl }
$$

Zaria Countess van Oranje-Nassau, Jonkvrouw van Amsberg (2006)
19 Friday * swe

Wedding anniversary of HM Carl XVI Gustaf King of Sweden and Silvia Sommerlath (r976) Wedding Anniversary of HRH Edward 20 Saturday

21 Sunday

| WEEK 26 | JUNE |
| :---: | :---: |
| 22 Monday |  |

$$
23^{\text {Tuesday }} \quad \text { * tux }
$$

24 Wcdncsday
$25^{\text {Thussday }}$
$26{ }^{\text {Friday }}$

27 Sauruday

## $28^{\text {Sunday }}$

$$
\text { A Louis XVI tellurion clock, c. } 1770 \text {. Height: } 53 \mathrm{~cm} \text {. }
$$




VIENNA
A Biedermeier Laterndluhr c. 1820 Height: 60 cm .
sCan Qr-Code or see picture notes for mor details on this object

Wedding anniversary of HIH Prince Akishino of Japan and Kiko Kawashima (1990)
$30^{\text {Tuesday }}$

HH Alexandra Countess of Frederiksborg, née Manley (1964)
1 Wednesday *ar

2 Thursday

Wedding anniversary of HM Albert II Prince of the Belgians and Donna Paola Ruffo di Calabria (1959)
3 Friday

Wedding anniversary of HSH Alois Hereditary Prince of Liechtenstein and HRH Sophie Duchess in Bavaria (1993)



DRING \& FAGE LONDON
English multiple-tube barometer, c. 1810. Height: 62 cm .
dredod or see picture notes for more details on this object

7 Tuesday

8 Wednesday

## c) Thursday

## 10 Friday

11 Saturday

## 12 Sunday



## CABRIER LONDON

Gold, agate and diamond chatelaines with watch and nécessaire, c. 1760.
Diameter: 50.5 mm .
SCAN QR-Code or see picture notes for more details on this object

##  <br> 

13 Monday

 | 28 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 29 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | $\begin{array}{llllll}30 & 21 & 22 & 23 & 24 \\ 31 & 28 & 29 & 30 & 31\end{array}$

14 Tuesday * FRA

HRH Victoria Crown Princess of Sweden, Duchess of Västergötland (1977)
15 Wednesday

16 Thursday

HSH Marie Princess of Liechtenstein née Countess Kâlnoky (1975)
17 Friday $\quad$ * Eid Ul fits isl

HRH The Duchess of Cornwall (1947) Felipe Juan de Marichalary Borbón (1998) Wedding Anniversary of HSH Constantin Prince
18 Saturday

19 Sunday

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| :---: | :---: |



Skeleton timepiece in the shape of a lyre, c. 1780. Height: c. 45 cm .

SCAN QR-CODE OR SEE PICTURE NOTES FOR MORE DETALLS ON THIS ObJECT|  | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 30 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |$\begin{array}{lllllll}31 & 20 & 21 & 22 & 23 & 24 \\ 31 & 27 & 28 & 29 & 30 & 31\end{array}$

HRH Haakon Crown Prince of Norway (r973) HRH Princess Alexandra of Hanover (1999)

```
21 Tuesday * bel
```

22 Wednesday

HH Felix Prince of Denmark (2002) HRH George Prince of Cambridge (2013)
$23^{7 \text { mamat }}$

24 Friday
$25^{\text {Sauruday }}$
$26^{\text {Sunday }}$



WEEK 31
JULY • AUGUST

27 Monday $2728 \quad 293031 \quad 1 \quad 2$ | 27 | 4 | 5 | 3 | 31 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | $\begin{array}{llllllllll}33 & 10 & 11 & 12 & 13 & 14 & 14 & 15 & 16\end{array}$ $\begin{array}{llllllllll}34 & 17 & 18 & 19 & 19 & 13 & 14 & 15 & 15 & 16\end{array}$ $242526 \quad 2728 \quad 29 \quad 3$

${ }_{31}^{24} 25$

## $28^{\text {Tuesday }}$

HRH Vajiralongkorn Prince of Thailand (1952)
29 Wednesday

## 30 Thursday

Wedding anniversary of HSH Hans Adam II Reigning Prince of Liechtenstein and Marie Countess Kinsky von Wchinitz und Tettau

31 Friday

1 Saturday * sur

2 Sunday


LOUIS JOUARD PARIS
A Louis XV cartel clock, c. 1745-50. Height: 75 cm .
SCan QR-Code or see picture notes for more details on this object

3 Monday

 $\begin{array}{llllllll}31 & 3 & 4 & 5 & 6 & 7 & 8 & 2 \\ 32 & 3 & 4 & \\ 33 & 1 & 1 & 12 & 13 & 14 & 15 & 1\end{array}$ $\begin{array}{lllllllll}13 & 10 & 11 & 12 & 13 & 14 & 15 & 1\end{array}$ | 34 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 35 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 36 | 31 |  |  |  |  |  |  |

HRH Louis Prince of Luxembourg (1986) Charlotte Casiraghi (1986)
4 Tuesday * CaN

5 Wednody

6 Thursday

7 Friday

8 Sauruday

HRH Princess Beatrice of York ( 1988 )
) Sunday $\quad *$ RSA



10 Monday

 \begin{tabular}{c|ccccccc}
32 \& 3 \& 4 \& 5 \& 6 \& 7 \& 8 \& 9 <br>
33 \& 10 \& 11 \& 12 \& 13 \& 14 \& 15 \& 16

 

34 \& 17 \& 18 \& 19 \& 20 \& 21 \& 22 \& 23 <br>
35 \& 24 \& 25 \& 26 \& 27 \& 28 \& 29 \& 30

 

36 \& 24 <br>
31
\end{tabular}

## 11 Tuesday

HRH Mabel Princess van Oranje-Nassau née Wisse Smit (1968)
12 Wednesday

HM Sirikit Queen of Thailand née Somdech Pharaborom Rajininath (I932)
$13^{\text {Thursday }}$

14 Friday

HRH Anne The Princess Royal (1950)
16 Sunday

J.P. KROESE AMSTERDAM

A 20-ct gold triple-cased pocket watch, hallmarked 1761 Diameter: 62 mm

17 Monday

 \begin{tabular}{l|lllllll}
34 \& 17 \& 18 \& 19 \& 20 \& 21 \& 22 \& 23

 

35 \& 24 \& 25 \& 26 \& 27 \& 28 \& 29 \& 30 <br>
36 \& 31 \& \& \& \& \&

 $36 |$

31
\end{tabular}

## $18^{\text {Tuesday }}$

19 Wednessay

HRH Mette-Marit Crown Princess of Norway née Tjessem Hoiby (1973)
20 Thursday * night of the sevens chil

HRH Gabriel Prince of Belgium (2003)
21 Friday

HM King Mohammed VI of Morocco (1963)
$22^{\text {Saturday }}$

23 Sunday

| WEEK 35 | AUGUST |
| :---: | :---: |
| 24 Monday | WK MO TU WE TH FR SA SU <br> 31     1 2  <br> 32 3 4 5 6 7 8 9 <br> 33 10 11 12 13 14 15 16 <br> 34 17 18 19 20 21 22 23 <br> 35 24 25 26 27 28 29 30 <br> 36 31       |

$$
25^{\text {Tuesday }}
$$

Wedding anniversary of HRH Haakon Crown Prince of Norway and Mette-Marit Tjessem Hoiby (2001)
26 Wednesday

HIH Maria-Laura Archduchess of Austria-Este, Princess of Belgium (1988
27 Thursday

HH Nikolai Prince of Denmark (1999)
28 Friday

## 29 Saturday

Wedding anniversary of HM Harald V King of Norway and Sonja Haraldsen (1968)
30 Sunday

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| :--- | :--- |


$\begin{array}{lllllllll}38 & 14 & 15 & 16 & 17 & 18 & 19 & 20 \\ 39 & 21 & 22 & 23 & 24 & 25 & 26 & 27\end{array}$

| 39 | 21 | 22 | 23 |
| :--- | :--- | :--- | :--- |
| 40 | 28 | 29 | 30 |

hM Rania Queen of Jordan née Yassine ( 1970 )
1 Tuesday

## 2 Wednesday

## 3 Thursday

4 Friday

Pierre Casiraghi (1987)
5 Saturday

6 Sunday



## 8 Tuesday

9 Wednesday

Victoria Federica de Marichalar y Borbón (2000)
$10^{\text {Thursday }}$

- biennale des antiquaires (paris)


## LECOULTRE SWITZERLAND

Gold hunter automaton pocket watch, c. 1900. Diameter: 52 mm .
scan qr-code or see picture notes for more details on this object

- biennale des antiquaires (paris)



JEAN-LOUIS RICHTER GENEVA
Mantel clock for the Chinese market, c. 18ro. Height: c. 50 cm .
scan Qr-code or see picture notes for more details on this obiect


## 15 Tuedy

HRH Letizia Princess of Asturias (1972) HRH Prince Henry of Great Britain (1984)
16 Wednesday * mex

17 Thursday

18 Friday

19 Saturday

$$
20 \text { Sunday } \quad * \text { sui }
$$



Prince Noah de Nassau (2007)

## $22^{\text {Tuesday }}$

Märtha Louise Princess of Norway (1971) Wedding anniversary of HIH Lorenz Archduke of Austria-Este and HRH Astrid Princess of Belgium (1984)

23 Wednesday * eid ul adha isl * yom kippur jew

24 Thursday * RSA

25 Fridy
$26^{\text {Sauruday }}$
$\frac{\text { HRH Salma Princess of Jordan (2000) }}{27 \text { Sunday } \quad * \text { mid autumn festival chi }}$

$$
\text { A gold, enamel and pearl-set watch, c. 1815. Diameter: } 62 \mathrm{~mm} \text {. }
$$

scan Qr-code or see picture notes for more details on this object

RH Iman Princess of Jordan (1996)
29 Tuesday

Juan Urdangarín y Bórbon (1999) Wedding anniversary of HRH Louis Prince of Luxemburg and Tessy Antony (2006) Emma
30 Wednesday

Ari Behn (1972)
1 Thursday * снI

2 Friday * CHI

3 Saturday * GER

4 Sunday * sukkot first day
Early Hague clock, c. 1662 . Height: c. 34 cm.
SCan QR-Code or see picture notes for more details on this object

| Wedding anniversary of HRH Cristina Infante of Spain and Iñaki Urdangarín y Liebaert (1997) HRH Emma- |
| :--- |
| nuel Prince of Belgium (2005) |
| WwW.Antique-horology.org |



GERMANY
Astronomical table clock，c． 1570 ．Height： 28 cm ．
Scan or－code or see picture notes for more details on this object
（x） 1010



6 Tuesday＊chi

7 Wednesday＊chi

8 Thursday

9）Friday
$10^{\text {Saturday }}$

## 11 Sunday



| WEEK 42 |  | OCTOBER |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12 Monday | * jar • usa • mex - esp |  |  |  |  |  |  |  |
|  |  | 42 | 1 | 213 | 31415 | 16 | 17 |  |
|  |  | 43 |  | 920 | 02122 | 23 | 24 |  |

$13^{\text {Tuesday }}$

14 Wednesday *al huper st

15 Thursday
HRH Christian Prince of Denmark (2005)
16 Friday

17 Saturday

HSH Marie Caroline Princess of Liechtenstein (1996)
18 Sunday
WWW.antique-horology.org


PARIS
Cercles-tournants mantel clock, c. 1785 . Height: c. 43.5 cm .
SCan QR-Code or See picture notes for more details on this object

HRH Laurent Prince of Belgium (1963)

$$
20^{\text {Tuesday }}
$$

HIM Michiko Empress of Japan née Shôda (1934). Wedding anniversary of Prince Guillaume of Luxembourg and Countess Stephanie de Lannoy

21 Wednesday

## $22^{\text {Thursday }}$

23 Friday * ashura isl

HIH Mako Princess of Japan (Akishino-no-miya Mako Naishinno) (199r)
24 Saturday

HRH Elisabeth Princess of Belgium (2001)
25 Sunday


VAUCHER, FLEURIER, SWITZERLAND
Matching pocket watches, c. 1850
Diameters: 58 mm .
SCAN QR-CODE OR SEE PICTURE NOTES FOR MORE details on this object


$27^{\text {Tuesday }}$

28 Wednesday * gre

HRH Sophie Princess of Liechtenstein, née Duchess in Bavaria (1967) Princess Tessy of Luxembourg née Antony (1985)

## 29 Thursday

$30^{\text {Friday }}$

## 31 Saurday

HRH Leonor Infante of Spain (2005)
1 Sunday $\quad *$ AUT $\cdot{ }_{\mathrm{BEL}} \cdot{ }_{\mathrm{FRA}} \cdot \mathrm{GER} \cdot \mathrm{ITA} \cdot \mathrm{LUX} \cdot \mathrm{ESP}$

| ww.antique-horology.org | 109 |
| :--- | :--- |



HM Sofia Queen of Spain, née Princess of Greece and Denmark (1938)
3 Tuesday *AMD

4 Wednesday * rus

5 Thursday

6 Friday

7 Saturday

PIERRE MILLOT PARIS
Astronomical mantel clock, c. 1760 . Height: 75 cm .
scan or-code or see picture notes for more details on this obiect

|  |
| :---: |



JEAN-SIMON DEVERBERIE PARIS
Directoire mantel clock, c. 1790. Height: 49 cm.
$10^{\text {Tuesday }}$

11 Wednesday * rra • UsA

HRH Guillaume Hereditary Grand Duke of Luxembourg ( $\mathrm{I}_{\mathrm{g}}^{\mathrm{g}} \mathrm{r}$ )
$12^{\text {Thursday }}$

13 Friday

14 Saurday

HRH Charles The Prince of Wales (1948)
15 Sunday


## BOVET LONDON

A gold and pearl-set pocket watch, c. 1820
Diameter: 62 mm .
sean Qr-code or see picture notes for more details on this object

| WEEK 47 |  | NOVEMBER |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 Monday | * mex |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | 23 30 | 析 | 425 | 26 | 27 | 2 |  |

## 17 Tuesday

18 Wednesday

## 19 Thursday

## 20 Fridy

Wedding anniversary of HM Elizabeth II Queen of the United Kingdom of Great Britain and Northern Ireland and HRH Th
Prince Philip Mountbatten Duke of Edinburgh (1947) Prince Philip Mountbatten Duke of Edinburgh (1947)

21 Saturday

- pan art and antiques fair (amsterdam)
$22^{\text {Sunday }}$
- pan art and antiques fair (amsterdam)



| $24^{\text {Tussay }}$ |  |
| :---: | :---: |
| 25 Wednesdy |  |
| $26^{\text {Thursdy }}$ * wise |  |
| $27^{\text {Friday }}$ * |  |



29 Sunday * advent sunday chri pan art and antiques fair (amsterdam)



LOUIS WALTRIN PARIS
Marble and ormolu mantel clock, c. 1785 . Height: c. 49 cm . scan qr-code or see picture notes for more details on this object


HIH Prince Akishino of Japan (Akishino-no-miya Fumihito Shinno) (I965)
1 Tuesday

HIH Aiko Princess of Japan (Toshi-no-miya Aiko Naishinno) (2001)
2 Wednesday

## 3 Thursday

Sverre Magnus Prince of Norway (2005)
4 Friday

Wedding anniversary of HRH Philippe Duke of Brabant and jonkvrouwe Mathilde d'Udekem d'Acoz (1999)
5 Saturday

HM Rama IX King of Thailand (1927)
6 Sunday * ESP


HRH Bhajara Kittiyabha Princess of Thailand (1978) HRH Amalia Crown Princess of the Netherlands (2003)

```
8 Tuesday * ESP • ITA • AUT
```


## 9 Wednesday

HIH Masako Crown Princess of Japan (1963) HIH Joachim Archduke of Austria-Este, Prince of Belgium (1991)
$10^{\text {Thursday }}$

## 11 Friday

JOHANN ENGELBRECHT, BERAUN BOHEMIA
Brass table sundial, c. 1675 . Height: 18 cm .
sCan Qr-Code or see picture notes for more details on this object


12 Saturday * mex

Wedding anniversary of HRH Anne The Princess Royal and Timothy Laurence (1992)
13 Sunday

HRH Nicolas Prince of Belgium (2005) HRH Aymeric Prince of Belgium (2005)
www.antique-horology.org


| WEEK 51 | DECEMBER |
| :---: | :---: |
| 14 Monday |  |

$15^{\text {Tuesday }}$

16 Wednesdy *ese

HIH Lorenz Archduke of Austria-Este, Prince of Belgium (1955)
17 Thursday

James, Viscount Severn (2007)
18 Friday
$19^{\text {Saturday }}$

SWITZERLAND
Gold musical automaton watch, c. 1780.
Diameter: 62 mm
SCan QR-Code or see picture notes for more details on this object

##  <br> 回


$22^{\text {Tuesday }}$

23 Wednesday *AR

HIM Akihito Emperor of Japan (1933) HM Silvia Queen of Sweden, née Sommerlath (1943)
24 Thursday * christmas eve (chr.)

25 Friday $\quad *$ christmas day (chr.)

26 Saturday * christmas (boxing day)

DUMIER, BURSINS SWITZERLAND
Pendule religieuse, c. 1690. Height: 44 cm .
27 Sunday

| WEEK 53 |  | DECEMBER • JANUARY |
| :---: | :---: | :---: |
| 28 Monday | * aus |  |

## $29^{\text {Tuesday }}$

HIH Kako Princess of Japan (Akishino-no-miya Kako Naishinno) (1994)
30 Wednesday

31 Thursday

1 Friday $*_{\text {new year's day } 2016}$

2 Saturday

3 Sunday


ROBERT MANLEY LONDON
A mahogany musical spring-driven bracket clock, c. 1790 . Height: 51 cm .
sCan Qr-Code or see picture notes for more details on this object

| Denver |  | Dubai |  | Beijing/Hongkong |  | London |  | Los Angeles |  | Mumbai |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dubai | +II | Denver | -II | Denver | -15 | Denver | -7 | Denver | +I | Denver | -12 |
| Hongkong | +15 | Hongkong | +4 | Dubai | -4 | Dubai | +4 | Dubai | +12 | Dubai |  |
| London | +7 | London | -4 | London | -8 | Hongkong | +8 | Hongkong | +16 | Hongkong | +3 |
| Los Angeles | - | Los Angeles | -12 | Los Angeles | -16 | Los Angeles | -8 | London | +8 | London | -6 |
| MET | +8 | Miami | -9 | Miami | -13 | Miami | -5 | Miami | +3 | Los Angeles | -13 |
| Miami | +2 | MET | -3 | MET | -7 | MET | +I | MET | +9 | MET |  |
| Moscow | +10 | Moscow | -1 | Moscow | -5 | Moscow | +3 | Moscow | +II | Moscow |  |
| New Orleans | +1 | New Orleans | -10 | New Orleans | -14 | New Orleans | -6 | New Orleans | +2 | New Orleans | -II |
| New York | +2 | New York | -9 | New York | $-13$ | New York | -5 | New York | +3 | New York | -10 |
| Sydney | +17 | Sydney | +6 | Sydney | +2 | Sydney | +10 | Sydney | +18 | Sydney |  |
| Tokyo | +16 | Tokyo | +5 | Tokyo | +1 | Tokyo | +9 | Tokyo | +17 | Tokyo | +4 |
| MET |  | Moscow |  | New Orleans |  | New York |  | Sydney |  | Tokyo |  |
| Denver | -8 | Denver | -10 | Denver | -I | Denver | -2 | Denver | -17 | Denver | -16 |
| Dubai | +3 | Dubai | +1 | Dubai | +10 | Dubai | +9 | Dubai | -6 | Dubai |  |
| Hongkong | +7 | Hongkong | +5 | Hongkong | +14 | Hongkong | +13 | Hongkong | -2 | Hongkong |  |
| London | -I | London | -3 | London | +6 | London | +5 | London | -10 | London | -9 |
| Los Angeles | -9 | Los Angeles | -II | Los Angeles | -2 | Los Angeles | -3 | Los Angeles | -18 | Los Angeles | 17 |
| Mumbai | +4 | Miami | -8 | Miami | +1 | Miami | - | Miami | -15 | Miami | -14 |
| Moscow | +2 | MET | -2 | MET | +7 | MET | +6 | MET | -9 | MET | -8 |
| New Orleans | -7 | New Orleans | -9 | Moscow | +9 | Moscow | +8 | Moscow | -7 | Moscow | -6 |
| New York | -6 | New York | -8 | New York | +1 | New Orleans | -I | New Orleans | $-16$ | New Orleans | -15 |
| Sydney | +9 | Sydney | +7 | Sydney | +16 | Sydney | +15 | New York | -15 | New York | - 14 |
| Tokyo | +8 | Tokyo | +6 | Tokyo | +15 | Tokyo | +14 | Tokyo | -I | Sydney |  |

met $=$ Central European Time $=$ Amsterdam, Berlin, Brussels, Geneva, Copenhagen, Madrid, Oslo, Paris, Rome, Stockholm, Vienna, Warsaw. ( $+=$ hours later $-=$ hours earlier)
time zone history 22 participating nations adopted the meridian of Greenwich as their prime meridian at the 1882 International Congress in Washington, finally concluding the implementation of the universal day, time and time zones.

## INTERNATIONAL FAIRS

| January | March | September | International spelling alphabet |  |
| :---: | :---: | :---: | :---: | :---: |
| American Int. Fine Art Fair. | Tefaf NED | Lapada |  |  |
| USA 22-25 January www.aifaf.com | Maastricht 13-22 March www.tefaf.com | GBR London. <br> www.lapadalondon.co.uk | A Alfa | S Sierra |
| Brafa |  |  | B Bravo | T Tango |
|  |  | November | C Charlie | U Unifor |
| BEL Brussels 24 Jan - I Febr. | Den Bosch Art Fair. | Pan | D Delta | V Victor |
| www.brafa.be | NED 's Hertogenbosch | NED Amsterdam | E Echo | W Whiskey |
| Winter Antique show. | www.afsh.nl | 2I- 29 November www.pan.nl | F Foxtrot | X X Ray |
| www.winterantiquesschow.com | Art Breda. | December | G Golf | Y Yankee |
|  | NED in-19 April | Olympia. | H Hotel | Z Zulu |
| Kunst \& Antiek Weekend | www.artantique.nl | GBR London | I India | 1 One |
| www.kunstenantiekweekend.nl | June | www.olympiaartsinternational.com | J Juliet | 2 Two |
|  | Olympia. |  | K Kilo | 3 Three |
| February | GBR London 18-28 June |  | L Lima | 4 Four |
| Palm Beach Jewellery, Art \& | www. |  | M Mike | 5 Five |
| Antiques Show | olympiaartsinternational.com |  | N November | 6 Six |
| USA Miami 15-18 February www.palmbeachshow.com | Masterpiece |  | O Oscar | 7 Seven |
|  | GBR London 25 Jun - I July |  | P Papa | 8 Eight |
|  | www.masterpiecefair.com |  | Q Quebec | 9 Nine |
|  |  |  | R Romeo | 0 Zero |



|  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Distance | Centimeter | Inch | Meter | Weight | Kilogram | Ounce | Gram |
| 1 Centimeter | 1 | 0.39370 | 0.01 | 1 Pound | 0.45359 | 16 | 453.59 |
| 1 Decimeter | 10 | 3.93700 | 0.1 | 1 Ounce | 0.02835 | 1 | 28.3495 |
| 1 Foot | 30.47 | 11.99 | 0.304 | 1 Gram | 0.001 | 0.03527 | 1 |
| 1 Inch | 2.54 | 1 | 0.0254 | 1 Milligram | 0.000001 | 0.0003527 | 0.001 |
| 1 Kilometer | 100000 | 39370.07 | 1000 | 1 Carat | 0.0002 | 0.00705 | 0.2 |
| 1 Micrometer | 0.0001 | 0.0003937 | 100000 | 1 Dram | 0.00177 | 0.06249 | 1.77184 |
| 1 Millimeter | 0.1 | 0.03937 | 0.001 | 1 Grain | 0.0006479 | 0.00228 | 0.06479 |
| 1 Meter | 100 | 3.937 .007 | 1 | 1 Newton | 0.10196 | 359.641 | 101.96 |
| 1 Mile | 160934.4 | 63359.9 | 1609.34 | 1 Stone | 6.34 | 223.93 | 6349.2 |
| 1 Nautical mile | 185200 | 72913.38 | 1852 |  |  |  |  |
| 1 Yard | 91.439 | 35.99 | 0.91439 | Volume | Liter | Gallon us | Pint us |
| 1 Pied du Roy | 32.4806 | 12.792 | 0.324809 | 1 Liter | 1 | 0.26417 | 2.11337 |
| 1 Pouce | 2.707 | 1.066 | 0.02707 | 1 Milliliter | 0.001 | 0.00026 | 0.00211 |
| 1 Ligne | 0.22558 | 0.08881 | 0.0022558 | 1 Deciliter | 0.1 | 0.026417 | 0.211337 |
|  |  |  |  | 1 Barrel us | 158.98251 | 41.99873 | 335.98 |
| Weight | Kilogram | Ounce | Gram | 1 Gallon us | 3.78541 | 1 | 8 |
| 1 Tonne | 1000 | 35270 | 1000000 | 1 Quart us | 0.94635 | 0.25 | 2 |
| 1 Kilo | 1 | 35.27 | 1000 | 1 Pint | 0.4731 | 0.125 | 1 |
|  |  |  |  |  |  |  |  |

## emperatur

Celcius
$\begin{array}{rrrrrrrrrrrrrrrrrrr}-70 & -60 & -50 & -40 & -30 & -20 & -10 & \mathbf{0} & 10 & 20 & 30 & 40 & 50 & 60 & 70 & 80 & 90 & 100 & 110 \\ -94 & -76 & -58 & -40 & -22 & -4 & 14 & \mathbf{3 2} & 50 & 68 & 86 & 104 & 122 & 140 & 158 & 176 & 194 & 212 & 230 \\ -56 & -48 & -40 & -32 & -24 & -1 & -8 & \mathbf{0} & 8 & 16 & 24 & 32 & 40 & \mathbf{4 8} & 56 & 64 & 72 & 80 & 88\end{array}$


| Barometric |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mbar. | Inch | Rijnl. | Adam. | Mbar. | Inch | Rijnl. | Adam. | Mbar. | Inch | Rijnl. | Adam. |
| 947 | 27.97 | 27.15 | 27.61 | 982 | 29.00 | 28.16 | 28.63 | 1017 | 30.03 | 29.16 | 29.65 |
| 948 | 27.99 | 27.18 | 27.64 | 983 | 29.03 | 28.18 | 28.66 | 1018 | 30.06 | 29.19 | 29.68 |
| 949 | 28.02 | 27.21 | 27.66 | 984 | 29.06 | 28.21 | 28.68 | 1019 | 30.09 | 29.22 | 29.71 |
| 950 | 28.05 | 27.24 | 27.69 | 985 | 29.09 | 28.24 | 28.71 | 1020 | 30.12 | 29.25 | 29.73 |
| 951 | 28.08 | 27.27 | 27.72 | 986 | 29.12 | 28.27 | 28.74 | 1021 | 30.15 | 29.27 | 29.76 |
| 952 | 28.11 | 27.30 | 27.75 | 987 | 29.15 | 28.30 | 28.77 | 1022 | 30.18 | 29.30 | 29.79 |
| 953 | 28.14 | 27.32 | 27.78 | 988 | 29.18 | 28.33 | 28.80 | 1023 | 30.21 | 29.33 | 29.82 |
| 954 | 28.17 | 27.35 | 27.81 | 989 | 29.21 | 28.36 | 28.83 | 1024 | 30.24 | 29.36 | 29.85 |
| 955 | 28.20 | 27.38 | 27.84 | 990 | 29.23 | 28.39 | 28.86 | 1025 | 30.27 | 29.39 | 29.88 |
| 956 | 28.23 | 27.41 | 27.87 | 991 | 29.26 | 28.41 | 28.89 | 1026 | 30.30 | 29.42 | 29.91 |
| 957 | 28.26 | 27.44 | 27.90 | 992 | 29.29 | 28.44 | 28.92 | 1027 | 30.33 | 29.45 | 29.94 |
| 958 | 28.29 | 27.47 | 27.93 | 993 | 29.32 | 28.47 | 28.95 | 1028 | 30.36 | 29.48 | 29.97 |
| 959 | 28.32 | 27.50 | 27.96 | 994 | 29.35 | 28.50 | 28.98 | 1029 | 30.39 | 29.50 | 30.00 |
| 960 | 28.35 | 27.53 | 27.99 | 995 | 29.38 | 28.53 | 29.01 | 1030 | 30.42 | 29.53 | 30.03 |
| 961 | 28.38 | 27.55 | 28.01 | 996 | 29.41 | 28.56 | 29.03 | 1031 | 30.45 | 29.56 | 30.06 |
| 962 | 28.41 | 27.58 | 28.04 | 997 | 29.44 | 28.59 | 29.06 | 1032 | 30.48 | 29.59 | 30.08 |
| 963 | 28.44 | 27.61 | 28.07 | 998 | 29.47 | 28.61 | 29.09 | 1033 | 30.50 | 29.62 | 30.11 |
| 964 | 28.47 | 27.64 | 28.10 | 999 | 29.50 | 28.64 | 29.12 | 1034 | 30.53 | 29.65 | 30.14 |
| 965 | 28.50 | 27.67 | 28.13 | 1000 | 29.53 | 28.67 | 29.15 | 1035 | 30.56 | 29.68 | 30.17 |
| 966 | 28.53 | 27.70 | 28.16 | 1001 | 29.56 | 28.70 | 29.18 | 1036 | 30.59 | 29.70 | 30.20 |
| 967 | 28.56 | 27.73 | 28.19 | 1002 | 29.59 | 28.73 | 29.21 | 1037 | 30.62 | 29.73 | 30.23 |
| 968 | 28.59 | 27.75 | 28.22 | 1003 | 29.62 | 28.76 | 29.24 | 1038 | 30.65 | 29.76 | 30.26 |
| 969 | 28.61 | 27.78 | 28.25 | 1004 | 29.65 | 28.79 | 29.27 | 1039 | 30.68 | 29.79 | 30.29 |
| 970 | 28.64 | 27.81 | 28.28 | 1005 | 29.68 | 28.82 | 29.30 | 1040 | 30.71 | 29.82 | 30.32 |
| 971 | 28.67 | 27.84 | 28.31 | 1006 | 29.71 | 28.84 | 29.33 | 1041 | 30.74 | 29.85 | 30.35 |
| 972 | 28.70 | 27.87 | 28.34 | 1007 | 29.74 | 28.87 | 29.36 | 1042 | 30.77 | 29.88 | 30.38 |
| 973 | 28.73 | 27.90 | 28.36 | 1008 | 29.77 | 28.90 | 29.38 | 1043 | 30.80 | 29.91 | 30.40 |
| 974 | 28.76 | 27.93 | 28.39 | 1009 | 29.80 | 28.93 | 29.41 | 1044 | 30.83 | 29.93 | 30.43 |
| 975 | 28.79 | 27.96 | 28.42 | 1010 | 29.83 | 28.96 | 29.44 | 1045 | 30.86 | 29.96 | 30.46 |
| 976 | 28.82 | 27.98 | 28.45 | 1011 | 29.85 | 28.99 | 29.47 | 1046 | 30.89 | 29.99 | 30.49 |
| 977 | 28.85 | 28.01 | 28.48 | 1012 | 29.88 | 29.02 | 29.50 | 1047 | 30.92 | 30.02 | 30.52 |
| 978 | 28.88 | 28.04 | 28.51 | 1013 | 29.91 | 29.04 | 29.53 | 1048 | 30.95 | 30.05 | 30.55 |
| 979 | 28.91 | 28.07 | 28.54 | 1014 | 29.94 | 29.07 | 29.56 | 1049 | 30.98 | 30.08 | 30.58 |
| 980 | 28.94 | 28.10 | 28.57 | 1015 | 29.97 | 29.10 | 29.59 | 1050 | 31.01 | 30.11 | 30.61 |
| 981 | 28.97 | 28.13 | 28.60 | 1016 | 30.00 | 29.13 | 29.62 | 1051 | 31.04 | 30.13 | 30.64 |



NICOLAS DE BEEFE MECHELEN BELGIUM
Spring－driven bracket clock，c． 1740 ．Height： 53 cm ．

|  |  |  |
| :--- | :--- | :--- |
| Australia | AUS | $1-1,26-1,3-4,6-4,25-4,25-12,26-12,28-12$ |
| Austria | AUT | $1-1,6-1,6-4,1-5,14-5,25-5,4-6,15-8,26-10,1-11,8-12,25-12,26-12$ |
| Belgium | BEL | $1-1,6-4,1-5,14-5,25-5,21-7,15-8,1-11,25-12$ |
| Canada | CAN | $1-1,1-7,4-8,7-9,25-12,26-12$ |
| China | CHI | $1-1,2-1,18>20-2,23>24-2,5-4,1-5,20-6,27-9,1>2-10,5>7-10$ |
| Denmark | DEN | $1-1,2>3-4,6-4,1-5,14-5,15-5,25-5,5-6,24-12,25-12,26-12,31-12$ |
| France | FRA | $1-1,6-4,1-5,8-5,14-5,25-5,14-7,15-8,1-11,11-11,25-12$ |
| Germany | GER | $1-1,6-1,3-4,6-4,1-5,14-5,25-5,3-10,1-11,25-12,26-12$ |
| Great Britain | GBR | $1-1,3-4,6-4,4-5,26-5,25-12,26-12,28-12$ |
| Greece | GRE | $1-1,6-1,23-2,25-3,10-4,13-4,1-5,1-6,15-8,28-10,25-12,26-12$ |
| Italy | ITA | $1-1,6-1,6-4,25-4,1-5,2-6,15-8,1-11,8-12,25-12,26-12$ |
| Japan | JAP | $1-1,11-1,11-2,21-3,29-4,3-5,4-5,5-5,20-7,21-9,23-9,12-10,3-11,23-11,23-12$ |
| Luxembourg | LUX | $1-1,3-4,6-4,1-5,14-5,25-4,23-6,15-8,1-11,25-12,26-12$ |
| Mexico | MEX | $1-1,2-2,16-3,2>3-4,1-5,5-5,16-9,12-10,2-11,16-11,12-12,26-12$ |
| Netherlands | NED | $1-1,3-4,6-4,27-4,30-4,14-5,25-5,25-12,26-12,28-12$ |
| New Zealand | NZL | $1>2-1,6-2,3-4,6-4,25-4,8-6,26-10,25-12,26-12,28-12$ |
| Russia | RUS | $1>7-1,23-2,9-3,1>-5,9-5,12-6,4-11$ |
| South Africa | RSA | $1-1,21-3,3-4,6-4,27-4,1-5,16-6,9-8,10-8,24-9,16-12,25-12,26-12$ |
| Spain | ESP | $1-1,6-1,3-4,1-5,15-8,12-10,1-11,6-12,8-12,25-12$ |
| Sweden | SWE | $1-1,6-1,3-4,6-4,1-5,14-5,6-6,19-6,31-10,24>26-12,31-12$ |
| Switzerland | SUI | $1-1,3-4,6-4,1-5,14-5,25-5,1-8,20-9,25-12,26-12,28-12$ |
| USA | USA | $1-1,19-1,16-2,16-4,25-5,4-7,7-9,12-10,11-11,26>27-11,25-12$ |
|  | U | National holidays by country code（in Olympic format）also occur at the week－planner pages． |

## INTERNATIONAL RELIGIOUS \＆MOVEABLE FESTIVALS

| Buddhist | 2014 | 2015 | 2016 | Islamic（Isl．） | 2014 | 2015 | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wesak（Buddha day） | 14 May | or Jun | 20 May | Ramadan 1st | 28 Jun | 18 Jun | o6 June |
|  |  |  |  | Eid ul Fitr | 28 Jul | ${ }_{17} \mathrm{Jul}$ | os July |
| Chinese（Chi） | 2015 | 2015 | 2016 | Eid－Ul－Adha | 04 Oct | ${ }_{23} \mathrm{Sep}$ | ${ }_{\text {iI }}$ Sept |
| Lunar new year | ${ }_{31}$ Jan | ${ }_{19} \mathrm{Feb}$ | 08 Feb | Al Hijira | 25 Oct | 14 Oct | o2 Oct |
| Night of Sevens（Qixi） | 02 Aug | 20 Aug | O9 Aug | Ashura | ${ }_{3} 3$ Nov | 23 Oct | ${ }_{1}$ Oct |
| Mid Autumn festival | o8 Sep | 27 Sep | ${ }_{15} \mathrm{Sep}$ | Milad un Nabi（su） | ${ }_{13} \mathrm{Jan}$ | ${ }_{03} \mathrm{Jan}$ | 12 Dec |
| Winter Solstice Festival | 2I Dec | 21 Dec | 21 Dec |  |  |  |  |
|  |  |  |  | Jewish（Jew．） | 2014 | 2015 | 2016 |
| Christian Orthodox | 2014 | 2015 | 2016 | Passover 1st day | ${ }_{15} \mathrm{Apr}$ | 4 Apr | 23 April |
| Christmas day | ${ }_{0} 7 \mathrm{Jan}$ | 06 Jan | ${ }_{0} 7 \mathrm{Jan}$ | Shavout 1st day | 04 Jun | 24 May | 12 June |
| Lent Monday | ${ }_{03} \mathrm{Mar}$ | 18 Feb | 16 Mar | Rosh Hashanah | ${ }_{25} \mathrm{Sep}$ | ${ }_{14} \mathrm{Sep}$ | ${ }_{3} 3$ Oct |
| Easter day | 20 Apr | 12 Apr | oı May | Yom Kippur | 04 Oct | ${ }_{23} \mathrm{Sep}$ | 12 Oct |
| Ascension | 29 May | 21 May | 09 Jun | Sukkot 1st day | 09 Oct | 04 Oct | ${ }_{17} \mathrm{Oct}$ |
| Pentecost | 08 Jun | 31 May | 19 Jun | Source：when－is．com |  |  |  |
| Christian Western | 2014 | 2015 | 2016 |  |  |  |  |
| Epiphany（3 Könige） | 06 Jan | 06 Jan | o6 Jan |  |  |  |  |
| Ash Wednesday | 05 Mar | 18 Feb | ıo Feb | 回学回 | 回 ${ }^{2}$ |  |  |
| Easter day | 20 Apr | O5 Apr | ${ }_{27} \mathrm{Mar}$ |  | 3 |  |  |
| Ascension day | 29 May | 14 May | os May | 15 | 장 |  |  |
| Whitsun Pentecost | 08 Jun | 24 May | 15 May | 므！84＊ | 回： |  |  |
| Advent Sunday | 30 Nov | 29 Nov | 27 Nov | when－is．com | officehol | ays．com |  |




## These picture notes provide additional information on the objects.

## the page numbers refer to the pages in the diary on which they are depicted.

OVER A portrait of an African woman holding a clock, a painting on canvas ( $74.5 \times 53 \mathrm{~cm}$ ) attributed to Annibale Carracci ( 1560 - 1609). • Provenance: Carlo Maratti (1625-1713) mentioned in his inventory of assets $r i$ tratto d una mora che tiense in mani orologia (portrait of a black woman holding a clock). Philip V of Spain, upon his death in 1745 , mentioned it in the Queens antechamber. It was given by the Quartermaster General for the province of Segovia, Ramon Luis de Escobedo to Arthur Wellesley, 1st Duke of Wellington, just prior to August 1812. In a private collection in England until 2005 . This remarkable picture is an extremely rare individual porfrat of a black woman dating from the late 16th century. The finely dressed female sitter holds the viewer's gaze with a commanding directess immediacy and intensity of expression. The woman wears an expensive coral necklace, pearl earrings and, intriguingly, holds and presents to the viewer gilded tabernacle clock. In 16th century Renaissance Europe, such an object was an extreme luxury. It is also an item that exhibits functions of the highest technological order for the period. Its hexagonal shape suggests that it was made in Germany, around $1550-1600$. It is made up of an outer hour ring with Roman numerals, for showing the time, and an inner ring with faint indications of Arabic numerals, suggesting that the clock also had an alarm function. It even appears to have been equipped with touch pieces for telling the time at night. The clock therefore exists not just as an audacious display of wealth but also as a clear signifier of the sitter's or the patron's modernity and perhaps even intellectual advancement because of his interest in complex horological technologies. One could also interpret the clock - a signifier of the passing of time and the transience of life - as a momento mori charging the image with a moralistic overtone, in a similar way to the works of the vanitas genre. A clock, also a symbol of a well-regulated life, was an attribute of Temperance (which with the female personifications of Justice, Prudence and Fortitude was one of the four cardinal virtues). Indeed, the hand of the clock appears to b broken, making it difficult to read the time, which adds further intrigue and allusion to the symbolic function of the clock in this work. The siter's coral necklace can be interpreted in a similarly symbolic way, and encour ages an allegorical reading of the paincing, for a coral necklace is often an atribute of Africa personifed. The painter, Annibale Carracci, was an admired painter of his time and a vital force in the creation of Baroque sylle.

 Study in the Reform of Italian Painting Around 1590, 2 vols. London, 1971.

See QR-code link for more details.

Surce • wyww tomassobrothers co uk
PAGE 12 A Dutch Louis XIV barometer, made c. 1720. The burl alder-veneered oak case has an arched pediment, ebony mouldings and richly engraved fire-gilt register plates and cartouches. The barometer scale is divided into inches, which are subdivided into tenths. To the right of the scale is a manual setting hand. $\cdot$ The system applied on the register plates, the indication in inches on separate summer and winter scales, is characteristic of early Dutch barometers; later the left-hand plate was used for imperial inches whilst the right-hand one was reserved for Rhineland inches. The long alcohol thermometer has a large Florentine scale divided as follows: $100-0-80$. To the left and the right of the thermometer scale there are 18 engraved fire-gil cartouches with the ambient condithe thermometer and barometer tube reservoirs are protected by a vertically sliding reservoir cap. The tops of the tubes are surmounted by a winged-cherub head.

SOURCE - Whan.ontjNantiek.com
page 14 A South-Netherlandish spring-driven tabernacle clock (Türmchenuhr), stamped Brussel and the maker's mark C, c. 1560 . The domed case is made of brass and fire-gilt and is richly engraved in scroll motifs. There are winding holes on either side with engraved letters for their functions R (révei) for the alarm, $\mathbf{S}$ (sonnerie) for the striking train and $\mathbf{L}$ for the going train. The dome is pierced to enhance the sound of the bell and is surmounted by a carrying hande. There are four finials on the corners. The siver dial at he font has a Roman chapter ring widh touch brass hand to set the alarm tine on an Arabic ring The iron and gilt brass movement is constructed berween vertica bars. The going train has a vertical verge escapement with balance and a gut fusee. The striking train is controlled by a count wheel and indicates the hours on a bell under the dome. The clock can be placed in its original leather-covered travelling case for transport purposes. It has a round window at the front so that the dial remains visible. - Height: 18 cm .

PAGE 16 A pair of Swiss gold and champlevé enamel bangles, one with a watch and the other with a vinaigrette, signed Henry Capt-Aubert à Génève, c. 1830.

PAGE 18 A one-day marine timekeeper with a 102 mm diameter bronze dial plate, with three white enamel subsidiary dials, the upper dial indicating hours in Roman numerals. To the lower left is a dial indicating minutes with Arabic five-minute divisions and to the lower right a seconds dial. The dial plate is engraved and signed between the latter two dials: Larcum Kendall London. Polished and blued steel poker hands with a fine polished and blued steel pointer second hand with a counterpoised tail read the time. Brass, one-day full plate fusee movement with four turned pillars and a highly engraved balance bridge, with six-spoked, open table. The plain potence plate is engraved: Larcum Kendall London 174. The fusee, which has Harrison's maintaning powe has a brass pipe around the winding square and acts with a standing barrel. The timekeeper has a four-wheel train plus a great wheel without remontoir. The timekeeper contains Kendall's own design of escapement, with steel, double, co-axial crown wheels acting on a sapphire pallet. The hardened steel balance has a three-turn blued-steel spiral balance spring, of tapered form, with a long, somewhat straighter tail, acting against a pivoted compensation curb, controlled by a bimetallic spiral compensator (known as 'chelsea-bun' compensation), and a secondary 'isochronal' curb pin. The jewelling extends to the balance (diamond upper endstone in a polishe steel setting), escape wheel, contrate wheel and third wheel, all with endstones, and the pallet as mentioned. The timekeeper is contained within a bronze drum-type case with convex glass in a narrow bezel over the dial. It has a large, circular, swivelling winding shutter mounted on the base. • The timekeeper fits into an octagonal mahogany outer case, made by John Roger Arnold in 1802 (originally gimballed within a further box), which has an ivory tablet engraved in gothic script 'Royal Observatory'. The timekeeper was commissioned by the Board of Longitude as a further simplified version of K2, and was completed in 1775. It was issued to Captain to Newfound in mimb 1789 It was was then issued to Captain George Vancouver for his 'Inyage to explore he Norch West coast of America (17911795). It then served with Matthew Finders in the Mnvestigator from 1802 to 1805 atter which it appears Charlbuy in Oxfordhi 1
 April 1735 Larcum was aprentice John Jeffys for seven years. In 1742 immediately after his Mospenticeship paded he set up on his own, working almost
 We Kll 1 effects sold strongly suggest the home of a lifelong bachelor. $\cdot$ See QR link on picture page for more details.
ource • www.rMg.co.uk


PAGE 20 A small Japanese lantern clock, made around 1800. The case is made of brass with two doors at the sides. The front is embellished by sedge motifs, while there is a silver bird in the top corner and another animal in the right bottom corner. The case is surmounted by a brass foliot and a substantial bell. The weight-driven twotrain iron movement is of 24 -hour duration with rope wind. The going train has a verge escapement. The time keeping is adjusted by moving small weights, which are suspended in notches on the foliot, nearer to or further away from the centre. The striking train is regulated by a count wheel and indicates the hours and half hours. The 24-hour dial has a painted chapter ring with Chinese zodiac symbols and Japanese numerals for the indication of the time. - Height: 20.5 cm .

Source • www.toeboschantiques.com


PAGE 22 A Dutch Louis XIV religieuse, signed LEMAIRE on the dial and the movement, c. 1690. The turteshell and ebony-veneered case has a broken arch pediment and two windows to the sides. The black velvet-covered dial has an engraved pewter chapter ring with full outer minute marking. Finely foliate pierced and engraved gilt hands, pierced and extremely finely engraved upper spandrels and ornament below, forming a gallery and bearing the signature. The twin-train two-week movement has five pillars, verge escapement and silk suspended articulated pendulum between two cycloidal cheeks, as devised by Huygens. The Dutch count-wheel striking train indicates the hours and half hours on two bells differing in pitch with separate hammers. The very finely engraved backplate bears the signature, filled in with black French polish. The clock has its original winding key,

also used to open the front door. © Height: 50 cm . © The maker, Pierre Lemaire, was established in the Faubourg St-Germain in Paris in 1674. He was jailed in the Abbaye in 1687, along with his son Jean, for being protestant. All contents of his workshop was subsequently sold in 1687 upon which he took refuge in Amsterdam. It is very likely that this is where the present clock was produced. • Literature: Tardy, Dictionnaire des Horlogers Français, Paris, 1971, p. 371; R. Plomp, Spring-driven Dutch Pendulum Clocks 1657-1710, Schiedam, 1979; R. Plomp, Early French Pendulum Clocks, 1658-1700, known as Pendules Religieuses, 2009; H.M. Vehmeyer, Clocks - Their Origin and Development, 1320-1880, Gent, 2004, pp. 231, 446, 980.

SOURCE • WWW.HORLOGER.NET

page 24 A so-called Novelty Watch with a visible movement in the form of a vase, unsigned, Geneva,
c. 1815. The movement is situated between two shaped plaques mounted in a gold band protected by two crystals. It has a white enamel dial with Arabic hour numerals and minute ring, and blued steel lozenge hands. The back is mounted with a painted enamel plaque, the scene depicting "The Education of Cupid by Venus", surrounded by an old cut diamond-set border. The movement has verge escapement and a visible balance. The pendant is numbered 2140 and signed DC in a lozenge-shaped field. - Diameter: 49 mm . ${ }^{\circ}$ Literature: E. Jaquet and A. Chapuis, Technique and History of the Swiss Watch, Urs Graf Verlag 1953, plate 86.

Source - www.dekkerantiquairs.com


PAGE 26 An Empire marble, bronze and ormolu mantel clock with trllurion, signed on the enamel dial Z. Raingo à Paris, c. 1810-15. The chased and gilt bronze antique rotunda-form case with enamel lozenge-form cartouches bearing the names of the zodiac signs against a green lacquered ground, as well as the months and the date; this ring rests on green-lacquered bronze pillars with gilt bronze plinths, terminating in female heads, which in turn rest on a round green marble platform decorated with a gilt bronze leaf frieze. It is supported by a moulded white marble base adorned with the chased gilt bronze signs of the zodiac. The whole is raised on flattened ball feet. Be-
hind the dial, a column supports the planetarium, which is activated by an ivory crank handle. The planetarium's hind the dial, a column supports the planetarium, which is activated by an ivory crank handle. The planetariums rings and dials indicate: the daily rotation of the Earth, its orbit around the Sun, the position of the Earth at the equinoxes, the moons orbit around the Earth, its rotation on its axis, the moon phases as seen from the Earth, indicated by a a
 gilt bronze monopoedia with hons heads and paw feet. © his Raingo planetarium clook embodies the aesthetic and teng for the Count of Orrery by Englishma
 the most sought after due to the elegce of their cases and the perfection of their movements and mango
 By 1810 , Raingo had registered a patent, accompanied by a sketch, for a gilt bronze planetarium similar to the present piece; it is very likely the one that was ordered by Paul Arconati, Baron of Gaesbeek, as a gift to the Sultan of Turkey. Never delivered, that clock remained in the Gaesbeek family until it was acquired by the Brussels Mu-
sée du Cinquantenaire. A few other planetarium clocks by Raingo exist, but most, with rotunda cases veneered see du Cinquantenaire. A few other planetarium clocks by Raingo exist, but most, with rotunda cases veneered
in mahogany or burr walnut, date from a later period. Examples may be found in the Royal British and Royal in mahogany or burr walnut, date from a later period. Examples may be found in the Royal British and Royal Height: 34 cm . - The maker, Zacharie Raingo, was born in Mons, Belgium; this horologist is recorded as working Height: $34 \mathrm{~cm} .^{\circ}$ The maker, Zacharie Raingo, was born in Mons, Belgium; this horologist is recorded as working
in Tournai in 1806, and in Ghent around 1810. Shortly afterwards he settled in Paris, soon being named ‘Clockmaker to the Duke of Chartres' and in 1824 'Clockmaker to the Crown'. Within a period of just a few years, Raingo became one of the best known precision horologists of the Empire and Restoration periods.

SOURCE • www.Lapendulerie.fr

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PAGE 28 A Louis XV astronomical longcase regulator with equation of time, signed in the skeletonised centre Bouchet AP, c. 1765. The gilt bronze mounted tulipwood and amaranth case is stamped twice on the back S J JOLLAIN (Adrien-Jérôme Jollain). The main dial has Roman and Arabic numerals and outer calendar ring with the names of the month and numbers of days enclosed by a beautiful polychrome painted ring portraying the corresponding signs of the zodiac, with a pair of pierced gilt brass hour and minute hands and a pair of blued-steel pointers for the calendar indications. There are two smaller subsidiary dials, the one to the left showing universal time with calendar and the one to the right the phases of the moon and sun, the striking movement sounding on the quarters on two bells and on the hours on a single bell. $\bullet$ Height: 230 cm . ${ }^{\circ}$ The maker, Jean-Louis Bouchet (1737-92), was appointed Horloger du Roi by virtue of supplying the Garde-Meuble. He was renowned for the complexity and finesse of his clocks and was one of the first to create skeleton clocks. He supplied a number of
complex pieces to Louis XV , one of which with astronomical indications was described as a clock composed of different round movements in a crystal case, so that the different springs can be seen.' It was delivered in 1776 to Château de Bellevue, where Bouchet was given the responsibility for maintaining all the clocks in the royal collection. In 1768 he supplied miniaturized movements with astronomical indications for an ivory clock that had been turned by M. de Fontanieu for the King. In addition he created classical pieces of which four were supplied to the Garde-Meuble. His work can be admired at the Hermitage Museum, Saint Petersburg and the Archives Nationales, Paris. Having worked as a compagnon to Pierre Gille l'Ainé and Antoine-Charles Caron, Bouchet was received as a maitre-horloger in 1762 . Four years later he was established at rue Saint-Denis, by 1772 at rue Mont martre and by 1778 at rue Bourg 1Abbe. He then moved again and in 1781 was at rue Meslee, two years later at rue Saint-Martin and then in 1789 at rue Salle-au-Comte. In addition to Jollain, Bouchet used cases by other makers such as Philippe Caffiéri, the Osmonds, Balthazar Lieutaud, J-N. Clavelle and Jean Hauré; in addition his dials were supplied by Joseph Coteau and Edme-Portail Barbichon and his springs by Trabant. The present case was created by Adrien-Jerôme Jollain (maitre 1763 d .1788 ), who was established at the cloister Saint-Jean-de-Latran. He came from a family of horlogers but served his apprenticeship as an ébéniste and was received as a maitre in 1763 and thereafter specialised in making clock cases. - Literature: J.-D. Augarde, Les Ouvriers du Temps, Antiquorum, 1996, p. 285 ; P. Kjellberg, Le Mobilier Francais du XVIIIe Siécle, 1998, p. 445, illustrating a comparable Louis XV gilt bronze mounted violin-shaped tulipwood longcase regulator by Adrien-Jérôme Jollain.

## ource • www.reddingantiques.ch

PAGE 30 Large gold and enamel oval watch depicting views of the Bosporus, made for the Ottoman market by Rundell \& Bridge, Jewellers to their Majesties, London, c. 1820. The watch has a bridge calibre cylinder escapement, entirely pierced and engraved and an enamel dial with Turkish numerals. ${ }^{\circ}$ Larger diameter: 60 mm .
sоиعCE• www.somlo.com
PAGE 32 A French mantel clock in the shape of a reclining bacchante, signed on the dial Galle Rue Vivienne Paris, c. 1810. The case depicts an ormolu nude eating grapes on a chaise longue. The whole is set on a vert de mer marble base and is richly embellished by ormolu appliques, typical of the period. Lying on her daybed, a female bacchanal figure with a simple drape accentuating her hips holds aloft a cluster of grapes, bringing them voluptuously up to her lips. Arranged around her feet are a tambourine, thyrsus and two ewers - symbols of the Dionysian festivals. Rich ornamental bronze imagery, featuring two opposing lionesses on the façade grepe-filed baskers
 recoil was wheel strike for the hours and half hours on a silvered bell. Height: 52 cm . Note: The semi-reclining nymph figure, surrounded by bers. figure, surrounded by bacchic attributes, makes reference to the tragic love story of Bacchus and Erigone. In the the dawn"). Ikarios, unaware of his guest's identity, plays host to Bacchus, who, in exchange, presents him with the dawn). kanos, unaware of guest's identity, plays host to Bacchus, who, in exchange, presents him with a grape vine and teaches him how to transform the fruit into wine. Wanting to share this gift with the shepherds
of Attica, Ikarios offers them a flask filled with wine, and not knowing its effects they proceed to drink without of Attica, Ikarios offers them a flask filled with wine, and not knowing its effects they proceed to drink without
measure. Furious, and convinced that they have been poisoned, the shepherds club Ikarios to death, abandon-
 Erigone goes in search of him only to find his dead body. Inconsolable, the young girl hangs herself from the tree which marks her father's burial place. Erigone is represented here under Love's spell, in that one delightful moment when she succumbs to Bacchus, who, to seduce her, transforms himself into a bunch of grapes. Characteristic of First Empire taste for moral themes of heroism and courage, this tragic subject is expressed here in all its beauty. • Literature: Michael Shapiro, 'Monsieur Galle, Bronzier et Doreur', The J. Paul Getty Museum Journal, Vol. $6 / 7$ (1978/1979), pp. 57-74; Louna Zek, 'Bronzes d'ameublement et meubles français achetés par Paul Ier pour le château Saint-Michel de Saint-Pétersbourg en 1798-99', Bulletin de la Société de l'Histoire de l'Art Francais, 1994; Jean-Dominique Augarde, Une nouvelle vision du bronze et des bronziers sous le Directoire et l'Empire', L'Estampille-L'Objet d'art, January 2005, no. 398, pp. 62-85.

SOURCE • WWW.HORLOGER.NET

Page 34 An ebony-veneered spring-driven bracket clock, signed on both a recessed plaque on the dial and the backplate Roger Dunster, c. 1735. The dial with date and false-pendulum apertures and a rotating moon sphere In the top corners there are two subsidiary dials, the left-hand one for strike/silent and the right-hand one for rise-and-fall regulation. The twin-fusee movement consists of going and striking trains and has trip repeat. The going train has verge escapement whilst the Dutch-striking train is controlled by a rack, indicating the hours
and half hours on two bells of different pitch. - Height: 55 cm . - The maker, Roger Dunster, was born about 1695 and died in 1747. He was one of many English clockmakers who came to Holland. In 1722 he formed an association with Christopher Clarke in Amsterdam. The firm was called Clarke \& Dunster. Clarke was married to the daughter of Ahasuerus (II) Fromanteel in 1694. His firm operated, probably from that date, under the name Fromanteel \& Clarke until 1722, when he took on Roger Dunster as a partner, or perhaps sold the shop to him. Probably from 1729 Dunster began to operate the firm under his own name. In 1744 he bought a house on Vijgendam, Amsterdam. At that time he was regarded as the most important clockmaker in Amsterdam. After his death in 1747 the clockmaker Abraham Bruykens took over the business. - Literature: E. Morpurgo, Nederlandse klokken- en horlogemakers vanaf 1300, Amsterdam, 1970, p. 36; H.M. Vehmeyer, Clocks - Their Origin and Development 1320-1880, Gent, 2004, pp. 252, 452-456, 963.

SOURCE • www.toeboschantiques.com

page 36 A French brass striking lantern clock, signed on the dial CF Suedois Angers, c. 1650. The brass case has an engraved dial and is surmounted by a bell, partly hidden by the cast brass front fret, showing grotesque fishes with intertwined tails, often referred to as a dolphin fret. The drop finials are screwed into the pillars. There are two doors to the sides. The dial has a brass chapter ring with Roman hour numerals, with half-hour and quarter-hour divisions. The time is indicated by a single cast brass hand. There is a large Arabic alarm disc in the middle, with a Tudor rose cast in relief. There are comma-shaped knobs on the rim of the alarm disc to facilitate turning. The weight-driven 12-hour movement is constructed between plates. The going train has verge escapement and an original balance. - Height: 23 cm .
source • www.mentinkenroest.com
PAGE 38 A late sixteenth-century French, single-handed necklace watch - a so-called 'clock watch' - signed on PAGE 38 A late sixteenth-century French, single-handed necklace watch - a so-called clock watch - signed on
the backplate $E$. francois AParis c. 1600 . The plain fire-gilt case has a ring pendant at the top. The richly engraved front has a silver Roman dial with touch pieces and half hour markers. The centre of the dial depicts an engraved landscape with a town. The time is indicated by a single blued-steel hand. The gilt-brass day-going movement is constructed between wo oval plates connected by baluster-shaped pilars and has a going train wirh verge escapeblued steel ache is or 65 mm . The maker, E. F recorded.

SOURCE • www.crijns.com
Page 40 A French carriage clock, stamped on the backplate for Drocourt, c. 1880. The faceted-glass Anglaise case in cloisonné technique has a polychrome cloisonné enamel mask adorned with foliate scrolls, flowers and leaves with two dragons centrally. The eight-day movement has a lever-platform escapement and grande sonnerie striking on two gongs with repeat. There is a lever in the bottom plate to select either grande sonnerie, petite sonnerie or silence. The enamel dial has a subsidiary alarm dial below the main dial and has a central sweep second hand. • Height: $20.5 \mathrm{~cm} .^{\circ}$ The makers, Pierre and Alfred Drocourt, father and son, were initially established at Rue Debelleyme 28 in Paris but later moved to other places, amongst them Saint-Nicolas-d'Aliermont, near Dieppe in Normandy. They were active in the second half of the 19th century and had an excellent reputation for making carriage clocks, for which they were awarded prizes at several exhibitions in London, Paris and Besançon. Tardy, Dictionnaire des Horlogers Francais, Paris, 1971, p. 188.

SOURCE • www.gudemeis.nl
PAGE 42 A George III period chinoiserie longcase clock, by John Monkhouse, c. 1760. This clock has a pagoda top with pierced giltwood sound frets. The hood is profusely decorated in green and gold lacquer depicting flowers and foliage. The matted brass dial signed John Monkhouse, London, has a date aperture and a seconds dial, above an arched top with a background of gold stars on a blue ground with a rolling moon. There are two subsidiary dials depicting 'Hours Strike' and 'Silent' and 'Quarter Strike' and 'Silent' within elaborately pierced

scroll-work and mask spandrels. The case is fully decorated, the arched top trunk door depicting raised scenes in the colourful chinoiserie taste, including exotic birds and flowers, landscape views, architectural studies and marine views, all on a green ground with a selection of polychrome colours. The clock has a three-train weight-driven movement with anchor escapement and a seconds pendulum. The movement strikes the hours on a single bell and is recorded as having been active in London from 1756 to 1771 . He was known for his musical longcase clocks and automaton clocks. • Literature: B. Loomes, Watchmakers and Clockmakers of the World, London, 2006, p. 546. - Literature: E. Morpurgo, Nederlandse klokken- en horlogemakers vanaf 1300, Amsterdam, 1970, p. 131.

SOURCE • www.Raffetyclocks.com


PAge 44 A French Louis XIV religieuse, signed Marguerite AParis on the dial and the backplate, c. 1670-75. The turtleshell and ebony-veneered case has two arched windows to the sides. The backdoor is walnut-veneered on the inside with line inlays. The blue velvet-covered dial has an engraved gilt-brass chapter ring with full outer minute markings (Arabic numerals). The time is indicated by two pierced and engraved gilt brass hands. Below the chapter ring is a signature cartouche covering a small rectangular hole to set the pendulum going from the front. The single-train two-week movement has four pillars, verge escapement and silk suspended pendulum between cycloidal cheeks. ${ }^{\circ}$ Height: $52 \mathrm{~cm} .{ }^{\circ}$ The maker, Mathieu Marguerite was active as a clockmaker in Faubourg St. Germain, Paris in the second half of the seventeenth century. • Literature: Tardy, Dictionnaire des Horlogers Francais, Paris, 1971, p. 433; R. Plomp, Early French Pendulum Clocks, 1658-1700, known as Pendules Religieuses, 2009.


PAGE 46 An astronomical clock with terrestrial and celestial globes, made by Georg Roll and Johann Reinhold dated 1584. The clock is made of gilt brass, steel, silver, wood and glass; enamelled parts. - Height: 70 cm . - Source of Entry: Institute of the History of Science and Machinery (formerly in the Study of Peter the Great). 1947.
source • www.hermitagemuseum.or


PAGE 48 Astronomical table clock, signed on the dial Cronier Ainé Paris, made in the first quarter of the nineteenth century. The mahogany case is glazed on all sides and is surmounted by a planetarium. The movement is of typical design with pinwheel escapement, compensation pendulum and half-hour striking on a bell. The planetarium, which depicts the then known solar system, consists of five ivory spheres: representing the planets (with the exception of Pluto) turning around a brass sphere representing the sun (Pluto was discovered as late as 1930) The ivory earth turns on its axis together with its moon.

Surce • www.mhl-monts.ch


PAGE 50 A walnut bracket clock, signed on a plaque behind the false pendulum $S$ de Charmes London, c. 1730. The arched brass dial has a silvered chapter ring around a matted centre, which shows a date aperture and mockpendulum aperture. In the arch is a rise-and-fall regulation dial. The double-fusee verge movement of eight-day duration has an elaborately engraved backplate. The clock strikes the hours on a single bell and has pull-quarter repeat on a nest of bells. - Height: $39 \mathrm{~cm}(15.5 \mathrm{in})$. The maker, Simon de Charmes, was active in the final years of the seventeenth and the first half of the eighteenth centuries. He originated in Paris and probably fled to England freasons. He was a watchmaker, but also made longcase and bracket clocks, of which are: B. ture: Brian Loomes, Watch and Clockmakers of the World, London, 2006, p. 230.

SOURCE • www.RAFFetyclocks.com

PAGE 52 A 22 -carat gold pair-cased watch, the outer body of finely worked gold wire filigree floral patterns, signed PAGE S2 A on the backplate Henricus Harper, London, c. 1660 . Gold champleve dial, pre-hair spring balance, single hand,
verge escapement. - Diameter: 50 mm . The other a silver pair-cased watch, the outer body of finely worked silve verge escapement. - Diameter: 5 mm . The other a silver pair-cased watch, the outer body of fanely worked sir
wire filigree floral patterns, signed on the backplate Johannis Thomson, London, c. 1660 . The watch has a silver champlevé dial with tumbling numbers. Pre-hairspring balance, single hand, and verge escapement. - Diameter 50 mm .

PAGE 54 This chronometer belongs to the museum's collection of time devices used in the observatory of Leiden between 1670 and 1970. The Verification Service of Nautical Instruments bought this chronometer in 1887. The Service has its roots in 1787 when the Board of the Admiralty in Amsterdam set up a committee to look after the quality of maps and instruments on their ships. Only after 1858 did this committee really take quality measurement seriously by hiring the then director of the Leiden Observatory, Frederik Kaiser, as head of the Verification. Instruments such as chronometers as well as sextants were meticulously investigated. Sometimes it took a year before a chronometer was returned to the Admiralty. Probably due to the interaction between this service and the Leiden Observatory, the chronometer came to the Observatory in 1899. The chronometer was then adjusted to sidereal time by Abraham de Casseres. - Most marine chronometers started their life as timepieces. These timepieces, usually gimballed, were positioned near the centre of the ship to reduce the effect of motion upon them. They were not set during the voyage and were wound once a day. Most timepieces served between 30 and 40 years, but were regularly maintained and adjusted, and repaired if necessary. After their life as timepieces, they became observation watches. These watches were usually mounted in metal canisters and used for taking observations. They were calibrated against regulators before and after their observation. With the arrival of radio signals the need for chronometers on board ships ceased and in 1937 some chronometers were given to Museum Boerhaave. - Most of the chronometers in the collection of the museum are of the type common in England, as is this one by J.P. Dupont \& Zoon, who did not make chronometers themselves. They bought their chronometers from the clockmaker Victor Kullberg in London and had their name engraved on the dial as well: 'J. P. DUPONT \& ZOON. Rotterdam. №. 116'. Kullberg's number 4042 is found on the back of the dial, on the back plate and in the case. It has a silvered dial with subsidiary up-and-down and seconds dials, a movement with spring barrel and fusee with Harrison's maintaining power, bimetallic balance with half-second period, helical blued-steel balance spring, Earnshaw-type spring-detent escapement, and jewelled bearings for both balance and escape wheel. The balance is fitted with a palladium spring. Movement and dial are enclosed in a brass bowl with a screw cover holding the glass. The dial has a central hour hand (I-XII) and minute hand (divided in 60 parts). The subsidiary second dial is below the centre and there is an up-and-down dial above the centre. The chronometer has a duration of two days. - Literature: R.H. van Gent \& J.H. Leopold, The time keepers of Leiden Observatory, Leiden 1992, p. 40; Hans Hooijmaijers, Telling Time, Devices for Time Measurement in Museum Boerbaave, Leiden 2005, p. 58; H. Spek, Verificatie van de rijkszee- en luchtvaartinstrumenten, 1858-1978: de geschiedenis van een marinebedrijf, Oesstgeest 1979; A.G. Randall, The Time Museum Catalogue of Chronometers, Rockford, 1991, pp. 211-220. • Museum Boerhaave inventory number 10350.

SOURCE • www.museumboerhatye.nl
PAgE 56 A spring-driven bracket clock, signed on the chapter ring Corn Lerb Regenspurg, c. 1735. The beech PAGE 56 A spring-driven bracket clock, signed on the chapter ring Corn Lerb Regenspurg, c. 1735. The beech
and pinewood case is veneered and inlaid by brass, pewter, exotic wood and turtle-shell veneer and rests on brass toupee feet. Its two finely cut top side panels are backed with red silk allowing the sound to pass through, the two side windows allowing a wew of hovement, the rear panel being veneered and ind on the insid. The for their cespective notes followed by h-day draike It has a hew quith on six becoil for their respect nos form
 whapter ring with Ran numerals, both subsidiary dial rings in the top corners also in silvered brass the brass
 its own subsidiary window for the its own sui i - Literature: J. Abeler, Meister der Uhrmacherkunst, Wuppertal, 2010, pp. 343-44.

## ource • www.horloger.net

page 58 An English diagonal barometer, signed on the register plate, Io. HURT LONDON, c. 1740. The mahogany-veneered pine case has silvered brass register plates with a scale that runs from 28 to 31 inches and has a scale magnification of around eight times. At the top of the horizontal arm of the tube there is a brass setting hand, whilst there are weather conditions on the lower register plate: 'Stormy', 'Rain', 'Variable', 'Fair' and 'Ver.' Dry'. The glass reservoir is protected by a removable cap. Diagonal barometers, also called angle or sign-post Dry. The glass reservoir is protected by a removable cap.
barometers, are fascinating and because of their rarity a sought-after collector's item. The diagonal system was invented by Samuel Morland, who published his ideas in 1688 for the first time. The aim was to increase the scale which would result in a more accurate reading, so that small variations in air pressure were made visible. Indeed, the Torricelli tube has a functional scale from 70 to 79 centimetres mercury pressure. In normal weather conditions the variations in pressure remain within a maximum distance of about five centimetres. The principle
of diagonal barometers is related to the fact that when a mercury tube is positioned at an angle, the vertical height of the mercury column always remains the same, despite the mercury having to cover a longer distance. This results in a greater column length. The greater the angle of the tube, the longer the mercury column will be. Diagonal barometers only have the functional part of the tube at an angle. The tube is vertical over a length of about 70 centimetres above the mercury level in the reservoir at which point there is a sharp bend to the right, the angled part rising to the required vertical height of a normal tube of about 80 centimetres. The length of the angled part can vary considerably, depending on the angle of inclination and the accompanying scale increase.

Source • www.fontijnantiek.com

page 60 A George III period ebonised and brass mounted automaton bracket clock by Thomas Grinnard, London, c. 1770. The sides of the moulded ebonised case have pierced wooden sound frets, brass carrying handles and on the corners elaborate caryatids, with cascading flowers and foliage. The clock is raised on gilded brass scrolling foliage feet. The arched brass dial has a silvered chapter ring around a matted centre, which shows three winding holes, a date aperture and a silvered signature cartouche signed Ihos Grinnard High Holborn No 12. In the arch is a painted country scene depicting a couple playing tennis, with moving rackets and a mock pendulum masquerading as a tennis ball. The verge movement of eight-day duration has a finely engraved back-plate. The clock strikes the hours on a single bell and the quarters and half hours on a set of eight bells. - Height: 64 cm ( 25 in ). The maker, Thomas Grinnard, was active in the second half of the eighteenth century. $\cdot$ Literature: B. Loomes, Watchmakers and Clockmakers of the World, London, 2006, p. 326.

Source - www.raffetyclocks.com
PAGE 62 A French ormolu pendule d'officier, signed on the enamel dial Lepaute $H$. de l'Emp. Place du Palais R. (Horloger de l'Empereur Place du Palais Royal). The austere case of this clock is in typical Empire style with a minimum of ornamentation. Below the dial, which is set in an engine-turned bezel and protected by a convex glass, there is a small aperture with a steel lever. The engraving around this aperture indicates which mode of striking can be selected, petite sonnerie, grande sonnerie or silence. The movement has a going train with anchor escapement and short pendulum, which can be regulated from the front. The backplate shows the complicated striking work. In addition, the clock has an alarm. This is set by the alarm disc behind the hands, but some talent in the field of arithmetic is required, as the alarm always goes off at twelve o'clock sharp. Hence, the user has to calculate in how many hours between the moment he is setting it and twelve he would like to be woken and set the alarm accordingly. ${ }^{\circ}$ Height: $34 \mathrm{~cm} .{ }^{\circ}$ The maker, Lepaute, was a descendant of a distinguished family of clockmakers. As his address is mentioned here and since the clock was made around 1800 , it could be either Henry or Pierre-Basile.


PAGE 64 A South-German polychrome and parcel-gilt rack wall clock, c. 1770. The rack is mounted on a green-stained and parcel-gilt backboard surmounted by a shell ornament and embellished by cartouches and mouldings. The movement, set in an elaborate gilt bezel, has a $7.5-\mathrm{cm}$ enamel dial with Arabic numerals and five minute markings. The time is indicated by engraved and pierced gilt hands. The movement of 36 hour duration is driven by its own weight. It has verge escapement and a front pendulum (Kuhschwanz). $\cdot$ Height: 73 cm .

Source • www.gudemeis.nl
page 66 An English seventeenth century quarter-striking lantern clock, signed on the dial John Ebsworth at y Crossed Keys in Lothbury Londini fecit, c. 1660. The weight-driven day-going clock is made of brass and iron and Crossed Keys in Lethbury Londini fecit, c. 1660 . The weight-driven day-going clock is made of brass and iron
conse The quarter striking train is controlled by a count wheel and indicates all four quarters on a bell of higher pitch. The hour striking train which is also count-wheel controlled is activated by the last quarter struck It makes use of a larger bell. The time is indicated by two blued-steel hands. The clock also has an alarm, which is set with an alarm disc, the alarm time being indicated by the tail of the hand and shown on the disc in Arabic numerals for each hour. - Height: 40 cm . - The maker, John Ebsworth, was apprenticed to Richard Ames and freed in 1665 . He not only made lantern clocks, as there are also longcase clocks known to be by his hand, as well as sundials. He died in 1699. Literature: Brian Loomes, The Early Clockmakers of Great Britain, Tiptree, 1981, pp. 208-09; G. White, English Lantern Clocks, Woodbridge, 1989, pp. 127, 207, 490 and 492.

[^2]PAGE 68 An Empire pendule in the shape of a statue, signed on the enamel dial Baulse Cour Mandar $n^{\circ} 7$, c. 1805. The movement is supported by an Egyptian terracotta caryatid wearing a long classical toga that reveals her breasts and a nemes head-dress that is attached beneath the bust. - The unusual design of the present clock illustrates the influence of Napoleon Bonaparte's Egyptian campaign on French decorative arts in the late 18th and first two decades of the 19th century. The purpose of the campaign was to undermine Britain's dominance in the area. The model derives from a statuette created in 1788 by sculptor Louis-Simon Boizot (1743-1809) for the Sèvres Royal Manufactory. A decade later, it was produced in bronze by chaser François Rémond; one such clock is in the Prague Museum of Decorative Arts. Several years later, a variation of Rémond's clock was created - the model of the present clock. Two such examples are recorded: the first, in patinated and gilt bronze, was delivered by bronzier Claude Galle to the Elysée Palace. It is now part of the Mobilier National in Paris; the second
example, in plaster, bears the signature "Bausse au Meridian boulevard d'Antin"; it is today in a private collection. - Height: 34 cm . - The maker, Louis Bausse, is not mentioned in the literature. He appears to have been named master horologist during the revolutionary period. His workshop address, $\mathrm{n}^{\circ} 7$ Cour Mandar, confirms the based on the model registered by Jean-Simon Deverberie on the 3rd of Pluviose, year VII, which appeared on the market several years ago. A clockmaker by the name of Bausse, but whose first name was Pierre-Guillaume, signed the movement of a clock depicting Telemachus driving his chariot under the protection of Athena; he was perhaps the son of the present clock's maker, possibly having taken over his father's workshop during the Empire period. - Literature: P. Kjellberg, Encyclopédie de la pendule francaise, Paris, 1997, p. 417 ; H. Ottomeyer and P. Pröschel, Vergoldete Bronzen, Die Bronzearbeiten des Spätbarock und Klassizismus, Munich, 1986, p. 366, fig. 5.13.4.
source • www.lapendulerie.fr


PAGE 70 An early Dutch Friesland tail clock with automaton, signed and dated B: Haanstra, Boumeester der steede Sneek, 1768. The maddered oak case has a short tail and is of classic design with shaped vertical slide covering the pendulum and a pierced cast brass lenticle incorporating a Chronos figure. The arched gilt and polychrome dial with a date aperture and a rolling moon, indicating the moon phase and age. In the top corners two soldiers are depicted whilst the lower corners show two cherubs, carrying Dutch flags. In the arch there is a revolving rider and soldier automaton, which is set in motion by the striking train on the hour. There are two circles, one a row of soldiers and the other of riders, which move in opposite directions. The weight-driven movement has the classical birdcage construction. The going train has anchor escapement with a long pendulum whilst the striking train indicates the hours fully and the half hour with one stroke on a bell. • The maker, Bauke Wybrandus Haanstra (1712-1780) was the son of Wybrandus Haanstra, a shoemaker. On 9 May 1734 he married with Lieuwkje Gerryts Zwart. He died in 1780 and was buried in Sneek on 15 October of that year. Bauke Haanstra became a member of the city fathers of Sneek in 1761. This city council appointed him boumeester from 17651769. Boumeesters in the council were particularly concerned with public works. He was also governor of the local hospital. The Museum van het Nederlandse Uurwerk has a stoelklok in its collection, signed Bauke Haanstra Me Fecit A Sneek Ao 1736.
Source • wyww.mnuurwerk.nl


PAGE 72 A Louis XVI gilt bronze white marble terrestial globe clock, made by Augustin (II) Fortin, c 1770. The gilt bronze mounted white marble plinth is centred by a circular white enamel clock dial with black Arabic numerals for the hours, outer red Arabic numerals for the minutes and inner red Arabic numerals for the 31 days of the month with a fine pair of pierced gilt brass hands for the hours and minutes and blued steel pointer for the calendar indications. The case is surmounted by a rotating terrestrial globe inscribed on a plaque on the glob Chez le Sieur Fortin Ingenuera Pour Les Globes et Spheres Rue de la Harpe au Coin de la Rue du Foin, and further inscribed on a silver plaque attached to the globe Paris, having a golden sun and long pois

 moon sphere suspended from silvered band, what a shaped silver hour chapter ring around he globe marked berween the south and zenith markings Medi pour tous les peuples qui sont de sous ce meridian and further encaved with the symbls of the seven days of the week as well as the numbers 21/23/18/20/21/21, the hoizonta brass ring around the gobe engraved Oriente Leve du Soleil and Occident Couche du Soleil The eight-day move ent wh her half hour striking independently powers the for for 53 cm . The maker, Augustin II Fortin (d. 1784) descended from a family of clock and watchmakers and wa
himself a master clockmaker, renowned for his astronomical clocks and armillary spheres as well as his celestial and terrestrial globes. As evidence of his prowess in this latter field Fortin often signed his work as ingénieur or here ingenuera for globes and spheres. Having been received as a maitre in June 1769 Augustin II firstly worked independently at rue du Petit-Lion, he then went into association with his father and subsequently took over the family business at rue de la Harpe in 1778. Such were his talents that Fortin enjoyed the patronage of the king as well as other collectors and connoisseurs of science, astronomy and clocks. A number of examples of his own and his firm's work can be found today in the Musée des Arts et Métiers Paris at the National Maritime Museum London and at the Walters Art Gallery Baltimore. The Musée des Arts et Métiers houses, for instance, a planetarium, a celestial globe, three terrestrial globes, one of which is also known as a tellurium or loxocosme. The latter demonstrates the movement of the earth, the seasons and the unequal days. ${ }^{\circ}$ Literature: Pierre Kjellberg Encyclopédie de la Pendule Française du Moyen Age au XXe Siècle, 1997, p. 188, pl. A, illustrating another Louis XVI gilt bronze mounted planetarium clock by Augustin (II) Fortin of 1770 which was given by Louis XVI to Monsieur de Montillet, avocat général au Grand Conseil du roo, featuring a very similar rotating terrestrial globe and astronomical indications.
source • www.reddingantiques.ch


PAGE 74 A Vienna Biedermeier ormolu-mounted ebonised and mother-of-pearl wall regulator, a so-called Lat erndluhr with Grande Sonnerie striking on gongs, circa 1820. The three-train weight-driven movement has anchor escapement. It has pull repeat on the right-hand side. The dial is covered with mother-of-pearl and has a gilded chapter ring. The time is indicated by two blued-steel hands. The gilded weights are chased resulting in differ ent bands. The architectural hood of the clock is also decorated with mother-of pearl and has gilt mounts and columns. The steel-rod pendulum has a chased gilded bob. • Height: 60 cm . $\cdot$ Note: Grande Sonnerie, both the hours and quarters are struck at each quarter.
Source • www.toeboschantiques.com
PAGE 76 An English multiple-tube barometer, signed on the register DRING \& FAGE. 20 TOOLEY STREET LONDON., c. 1810. The boxwood register plate is protected by a glazed mahogany door surmounted by brass finials. The barometric pressure can be read from the scale of the right-hand tube - upside down. The scales and weather conditions are stamped into the wood. The barometer scale is divided from 31 to 28 , beginning at the bottom with 'Very Dry' and ending at the top with 'Stormy'. The inches are subdivided into sixteenths. The scale is about $43 / 4$ times larger than a scale on a normal stick barometer. On the left there is an alcohol thermometer showing the temperature in degrees Fahrenheit. - The makers, John Dring and William Fage, went into partner ship in 1798. The firm, making scientific instruments, was established at premises in Tooley Street and existed until 1860

Surce e wyw. fontunantiek.com

PAGE 78 Gold, agate and diamond chatelaine with watch, part of a pair, the other with a nécessaire, c. 1760. The quarter-repeating watch, which is signed Cabrier London, has verge escapement. The nécessaire contains a pair of quarter-repeating watch, which is signed Cabrier London, has verge escapement. The necessaire contains a pair of spoon. ${ }^{\circ}$ Lengths of chatelaines: 200 mm and 195 mm . $\circ$ Diameter watch: 47.5 mm .

Page 80 An English skeleton clock, designed as a French Lyre mantel clock in Louis XVI style, made in the second half of the eighteenth century. The base of grey and white marble is embellished by gilt ornaments in the shape of two mythological figures and rests on four ormolu bun feet. The frame is in the shape of a lyre with an ormolu ornament at the top depicting a bird within a laurel wreath. The movement has an open-shaped white enamel dial with Roman numerals and a pair of gilt period hands. The movement has skeletonised plates, the back plate in the shape of a star. It has a going train only, driven by a spring barrel and chain fusee. The pendulum has knife-edge suspension and is in the form of a pearl ring around the dial.
ource • www.vandrevenantiques.com


PAGE 82 A musical Boulle marquetry longcase clock signed Andries Vermeulen Amsterdam, c. 1720, with a rare Dutch marquetry case in Boulle technique. Perhaps made by a French or German cabinetmaker active in Amsterdam, who finished the case by using ebony, turtle shell, mother of pearl, pewter and glass. The hood with three finials: an Atlas figure and two black natives. The matted brass dial has a silvered chapter ring, pierced hands, two winding holes, a date aperture and a seconds dial, with a high-water aperture within. Further apertures showing the moon phase and the age of the moon and the image of the god of the day, with the day below. The corners with four-season spandrels. In the arch is a triangular aperture showing the months of the year, an image of the month, and the signs of the zodiac with their corresponding images. The three-train weightdriven movement has anchor escapement and a seconds pendulum, whilst the Dutch striking train indicates the hours and half hours fully on two bells differing in pitch. A separate musical train, which is squarely mounted on the movement and wound from the side, plays one of seven tunes every hour and a shorter tune on the half hour on a nest of bells, controlled by seven interchangeable music rolls, all of which have survived. • Height: 284.5 cm . ${ }^{\circ}$ The maker, Andries Vermeulen (c. 1650-1730), originally came from Emmerich. He was known for his musical longcase clocks and other complicated clocks. ${ }^{\circ}$ Literature: J. Abeler, Meister der Uhrmacherkunst, Wuppertal, 2010, p. ?; Cees Peeters, Hollandse Horloges, 2012, p. 316; E. Morpurgo, Nederlandse klokken en horlogemakers vanaf 1300, Amsterdam, 1970, p.132. - See QR link on picture page for more details.

SOURCE • www.RJKSMUSEUM.NL


PAGE 84 A Louis XV gilt bronze cartel bracket clock, signed on the enamel dial JOUARD A PARIS, c 1750. The waisted rococo gilt brass case, stamped with a crowned C is attributed to Jean-Joseph de Saint-Germain. The dial has outer Arabic five-minute and inner Roman divisions in blue and a pair of pierced gilt brass hands. The movement has five tapered pillars, anchor escapement, spring suspension, striking on the hour and half hour on a single bell with outside count wheel. - Height of the clock 51 cm ; height of the bracket 24 cm . ${ }^{\circ}$ The maker, Louis Jouard (d. before 1773), was probably trained at or worked in the workshop of Jacques Cogniet (1661-1731) and his son Jean-Baptiste Cogniet (d. 1726) who were at rue de la Monnaye and where Jouard was also listed in September 1724, when he was received as a maitre. When Jean-Baptiste Cogniet died Jouard married his widow Marie-Ursule Prévost and in so doing took over Cogniet's business. As his standing increased Jouard was asked to act as a Juré of his guild, 1741-43 and 1747-49 and then by 1750 had moved to the cloister Saint-Germain del'Auxerrois. Jouard is known to have to have worked with Honoré Noöl. He sold some of his clocks through the dealer François Darnault; when the latter's wife died in 1753 an inventory of her remaining stock included seven clocks, of which six were by Jouard. Today examples of his superb craftsmanship can be found in the Cleveland Museum of Art as well as Chateau de Versies. Literature. Pierre Kjelberg, Encyclopedie de la Pendule Fraņaise du Moyen Age au XXe Siecle, 1997, p. 91, p. F, illustrating a very similar clock with bracket signed on the dial Et ${ }^{\text {Baillon a Paris, the case likewise stamped with a crowned C, with additional surmounting foliage, below }}$ which the case is of
 significantly is signed Saint-Germain; the dial heing signed D. Robert l'Aîń à La Chaux-de-Fond.
source • www.reddingantioues.ch
PAGE 86 A polychrome stoelklok, made in the province of Overijsel in the east of the Netherlands, signed and PAGE 1 A polychrome stoelklok, made in the province of Overijsel in the east of the Netherlands, signed and showing scroll motifs and lead ornaments on top of the metal movement case. The weight-driven movement of 14 -hour duration has going and striking trains, and alarm. The going train has anchor escapement and the half-hour striking on a bell is regulated by a count wheel. • Herman ter Swaek was the son of Anthony ter Swaek, also a clockmaker in Goor (Eastern Netherlands). • Literature: H.H. Bossink, Oost Nederlandse klokken en Uurwerkmakers, Rijssen, 2000, p. 4/16. Former collection Sellink, author of J.L. Sellink, Dutch Antique Domestic Clocks ca. 1670-1870.

## SURCE • KATS.ANTIEKEKLokкen.com

PAGE 88 A 20 -ct gold triple-cased pocket watch signed on the dial and the backplate J.P. Kroese Amsterdam, c.1760. The outer repoussé case depicts King David playing the harp at the palace of King Saul. The plain inner case has a maker's mark IL for Jacob Losberg and is hallmarked with the year letter for 1761. The white enamel dial has an unusual aperture showing part of the balance, a so-called false pendulum. The dial has Roman hour numerals and outer Arabic five-minutes and minute divisions. The time is indicated by two blued-steel beetle
and poker hands. The full plated gilt brass movement has finely engraved decorations on the backplate, with the signature and address; it has verge escapement and chain fusee. The watch has a protecting case, covered with shagreen leather. • Diameter, incl. protecting case: 62 mm . - Literature: E. Morpurgo, Nederlandse klokken en horlogemakers vanaf 1300, Amsterdam, 1970, p. 74.

PAGE 90 An English mahogany eight-day table chronometer, signed and numbered on the silvered brass dial HARRIS Late HATTON \& HARRIS LONDON 658, c. 1830. The concave-sided mahogany case has a recessed panel and break-arch moulded bottom, raised on brass bracket feet and surmounted by a brass urn-shaped finial. The $13.5-\mathrm{cm}$ engraved latched dial has Roman numerals and five-minute markings. Above the middle there is an up-and-down dial and below a seconds dial. The spring-driven chain-fusee movement of eight-day duration has a sub-frame with Earnshaw's detent escapement, bi-metallic compensated balance with helical spring, the whole set in a brass cylinder, at the back a shutter engraved 'Wind up to the left hand every week. • Height: 33.5 cm . - The maker, Clement Harris, was active as a chronometer maker, initially in partnership with James Hatton from 1816-24. He continued on his own after Hatton's death, as is suggested by the present signature. He was established at 76 Cornhill London, EC. He died in 1842. • Literature: T. Mercer, Chronometers of the World, Malta, 1991, p. 157.

SOURCE • WWW.GUDEMEIS.NL
PAGE 92 Thirty-hour wall clock, a so-called Amsterdammertje signed on the chapter ring Otto van Meurs Amsteldam, c. 1740. The walnut-veneered oak case has a sliding front panel with an oval lenticle and wooden surround. The arched hood is surmounted by gilt finials, in the shape of statuettes and glazed panels to the sides. The arched brass dial has a silvered chapter ring and alarm disc; pierced blued steel hands; gilt cast brass scroll spandrels and a circular silvered Chronos plaque, inscribed with the saying NIET SNELDER DAN DE TYT ('not faster than time'). The brass plated movement has going and striking trains driven by a single weight (endless rope), as well as alarm. The going train has anchor escapement with a long pendulum whilst the Dutch striking train indicates the time on two bells differing in pitch, regulated by a count wheel. $\bullet$ Height: 125 cm . - The maker, Otto van Meurs (1714-1783), was a famous maker of longcase clocks and watches. He had his workshop in Lange Gasthuismolensteeg in Amsterdam. His son Rutger van Meurs was also a clockmaker. Literawr. E. Mop go, Ne, en horlozo Vehmeyer, Clocks - Their Origin and Development 1320-1880, Gent, 2004, pp. 254, 436, 1000.

## Surce • wyww.crins.com

PAGE 94 An 18 -carat gold hunter-cased, minute-repeating automaton pocket watch, signed and numbered PAGE 94 An 18-carat gold hunter-cased, minute-repeating automaton pocket watch, signed and numbered
LeCoultre nr. 1974, c. 1900. The plain polished case has a repeater slide in the band. The translucent enamel centred dial over an engine-turned sunburst motif has Roman numerals, spade gilt hands, and a separate second dial. To the sides there are two multi-coloured Jacquemarts ('striking Jacks') on a gilt brass background. They en bhind her her 52m. The make Elie LeCoutre (1842-1917), was the so Antre (1803-1881), who in 1833 , following his inven
 tion of a machine to cut watch pinions from steel, founded a small watchmaking workshop in Le Sentier. In 1844, he invented the world s most precise measuring instrument, the millionometre, and in 1847 he created the keyless winding system. In 1866 Antoine and Elie established the Vallee de Jouxs first full-fledged manufacture,
LeCoultre \& Cie., pooling their employees' expertise under one roof. Under this set-up, they developed in 1870 LeCoultre \& Cie., pooling their employees' expertise under one roof. Under this set-up, they developed in 1870
the first partially mechanized production processes for complicated movements. By the same year, the 'manufacthe first partially mechanized production processes for complicated movements. By the same year, the 'manufac-
ture' employed 500 people and was known as the Grande Maison of the Vallée de Jouxx, and by 1900, it had creture' employed 500 people and was known as the Grande Maison of the Vallée de Joux, and by 1900 , it had cre-
ated over 350 different calibers, of which 128 were equipped with chronograph functions and 99 with repeater ated over 350 different calibers, of which 128 were equipped with chronograph functions and 99 with repeater
mechanisms. From 1902 and for the next 30 years, LeCoultre \& Cie. produced most of the movement blanks for Patek Philippe of Geneva. In 1903 Edmond Jaeger, a Paris-based watchmaker to the Navy, became involved in the company and from 1937 it was renamed Jaeger Lecoultre.


PAGE 96 A richly decorated, so-called enchanted mantel clock, incorporating a singing bird, attributed to JeanPAGE
Louis Richter ( $1766-1841$ ), c 1810 . The case, signed Ilbery London is richly decorated with painted-enamel scenes on gold, pearls and feathers. It is surmounted by the singing bird, the mechanism of which is numbered sces $\mathrm{N}^{\circ} 271$ ) and attributed to Frerres Rochat (associated from c. 1800 to c . 1835). The eight-day movement has ( ${ }^{\mathrm{N}}$ 271) and attributed to Freres Rochat (associated from c . 1800 to c . 1835 ). The eight-day movement has
a 1839), was a well-known maker of clocks and watches for the Chinese market.

SOURCE • WWW..PATEKMUSEUM.COM


PAGE 98 A gold, enamel and pearl-set watch, signed and numbered on the backplate VOUMARD LOCLE 932. The enamel scene has been painted in an unusual and distinctive palette after an engraving by A. Conte of the painting 'Evening' by William Hamilton (1751-1801). It is attributed to the enamel painter Abraham Lissignol (1749-1819). The movement has Chinese duplex escapement. • Diameter: 62 mm .
source • www.somlo.com
PAGE 100 A Dutch Hague clock, signed on a silver cartouche on the dial Claude Pascal Hagae Hollandiae, c. 1662. The pine case is ebony and turtle-shell -veneered. The back has a star inlay on the inside. There are two suspension eyes at the top whilst the clock can also rest on four ball feet. The eight-day going, plated movement, driven by a spring in a spring barrel, has a going train with verge escapement and short pendulum, suspended between two cycloidal cheeks. The back plate is also signed by the maker: $C$. Pascal. The velvet-covered dial has a silver chapter ring with Roman hour numerals and Arabic minute markers, surrounded by four silver cherubhead spandrels, the time being indicated by two pierced and engraved hands. ${ }^{\circ}$ Height: 34 cm . ${ }^{\circ}$ The maker, Claude Pascal (b. before 1635, d. 1674), was probably of Swiss origin (Geneva) and was established as a watchmaker in The Hague from 1654; he married Margarithe Paje there in 1655. His daughter Anne-Marie (b. 1663) was married to the clockmaker Pierre Batard, who was also from Geneva and worked in The Hague. Pascal went to Paris in 1670 , where he died three or four years later. He made at least six pendulum clocks for clients in Paris, for whom Huygens acted as an intermediary. There was a watch by Pascal in the Feill collection. - Literature: R. Plomp, Spring-driven Pendulum Clocks 1657-1710, Schiedam, 1979, pp.187-193; H.M. Vehmeyer, Clocks, Their Origin and Development, 1320-1880, Gent, 2004, passim.

## mentinkenroest.com

page 102 An astronomical table clock, ascribed to Carl Gutbub, c. 1570. The case has removable side doors with PAGE
fluted square pillars, both engraved with a warrior, the lower sections with a monarch sitting on his throne. The four sides of the moulded base each with an oval medallion, engraved with the four seasons and the names of the continents known at the time: EUROPA, ASIA, AFRICA and AMERICA. On top a gallery and a pierced and engraved dome covering the two bells. There are three gilt brass dials on the front side and three astronomical dials on the opposite side. The font side. dial hour divion

 chapter ring, hour division 1 - XII twice; touch pins, single steel hand. The time indication synchronised with 10-20-30 A gilt brass hand with es in the ecliptic, the other indicating the approximate length of day and night on a $8-16-8$ scale. A hird hand in hith with a moon emblem indicating the position of the moon in the ecliptic. Iwo subsidiary engraved silver dials striking train. The day-going partly gilt brass movement has an extremely compact construction going and quarter- striking train and the alarm mechanism mounted in the space enclosed by the front and rear dials, the bottom and top plates, measuring only $10 \times 6.7 \times 5.3 \mathrm{~cm}$. Going train in front of the quarter-striking train verg escapement with a two-spoke wheel balance $6.7 x$ on base. No fusee; no slow/fast regulation. Quarter striking 1-4; the quarter-striking train releasing the hour strik ing. Gilt and engraved spring barrels; the alarm mechanism, mounted on the left side to a shaped and engraved ing. Glate surmounted by and forming a whole with a shaped square pillar, and embellished by an applied dragon head. Hour striking; plain count wheels; two superimposed bells in the dome, the larger one for hour striking and alarm, the smaller one for sounding the quarters. * Height: 18 cm . - Note: The former Fremersdorf
collection in Luzern, Switzerland had an almost identical clock bearing the punchmark CG and the mark of collection in Luzern, Switzerland had an almost identical clock bearing the punchmark CG and the mark of
the city of Strasbourg. CG stands for Carl Gutbub. - Literature: Jürgen Abeler, Meister der Uhrmacherkunst, Wuppertal, 2010, p. 200; H.M. Vehmeyer, Clocks - Their Origin and Development 1320-1880, Gent, 2004, pp 772-775.


PAGE 104 A French Louis XV ormolu mounted corne verte bracket clock, signed on the backplate Guill.me Gille AParis, c. 1740. The waisted case is of typical design, is veneered with green horn, and richly embellished with ormolu appliqués in scroll, leaf and floral motifs, the whole surmounted by a floral and foliate mount. The sides have glazed windows, whilst the case rests with scroll feet on a matching ogee-shaped bracket with similar mounts. The twenty-five piece ornate ormolu dial, diameter 24 cm ., has blue Roman hour numerals on medallion-shaped cartouches and blued-steel, shaped hands. The spring-driven rectangular plated movement with five knopped pillars is of 8-day duration, has a tic-tac escapement, a silk-suspended pendulum and half-hour cont-wheel striking on a bell. $\cdot$ Height: $111 \mathrm{~cm} .^{\circ}$ The maker, Guillaume Gille, was married to Antoinette Leteliier, called Leblond. He worked for members of the nobility. © Literature: J.-D. Augarde, Les Ouvriers du Temps, Antiquorum, 1996, p. 323.
source • www.gudemeis.nl


PAGE 106 A French, so-called cercles tournants clock, made c. 1785. The case is modelled as a cylindrical reliquary richly decorated with finely chased gilt bronze and an arrow that indicates the hours and minutes. On either side, two lightly draped winged cherubs appear to support the clock. The polylobed white marble base is elegantly adorned with beading and pierced friezes of stylised leaves, scrolls, and flowers. The whole is raised upon four finely chased toupie feet. The two revolving ring dials, composed of rectangular white enamel cartouches, indicate the hours in Roman numerals and every fifth minute in Arabic numerals. This clock's elaborate design is freely based on a model that, while different in composition, features identical cherub figures. That model, which was quite successful, is thought to have been made by a Parisian bronzier such as François Rémond or PierrePhilippe Thomire, under the supervision of Dominique Daguerre, then the most important dealer in Parisian luxury items. Daguerre would have retained ownership of the model and would have been able to produce variations of it as he desired. Among the known similar examples, one clock whose dial is signed Guydamour is today in the Frick Collection in New York; a second example, perhaps identical to the one previously mentioned, was formerly in the Russian Imperial collections. It was sold at auction in Berlin in 1928.
source • www.lapendulerie.fr
PAGE 108 A pair of matching Swiss mirror-image gold and enamel watches, made for the Chinese market, PAGE 108 A pair of matching Swiss mirror-image gold and enamel watches, made for the Chinese market,
c. 1850 . The watches, signed Vaucher a Fleurier, have highly polished steel movements with rare bimetallic c.185. The watches, signed aucher a fleurier, have highly polished steel movements with rare bimetallic
balances. The watches come with their original presentation box. $\cdot$ Diameters: 58 mm . $\cdot$ Note: The introduction of watchmaking in Fleurier, near La Chaux-de-Fonds, began with David-Jean-Jacques-Henri Vaucher as early as 1730. This sector grew rapidly and there were as many as 15 watchmakers in Fleurier by 1750. The figure soared iof hand
 Their example was subsequely followed by or Fleurie: Vaucher Fròres (1848); Edourd Their example was subsequenty followed by other companies baid 1844 and the Dimi from Geneva. After China, ored exis ro outlets opened up for the manufacturers of Fleurier, who adapted their , Ahe Mirror fSed production ${ }^{\text {Prer " } C b i n e " ~}$ Prestigious Pairs of "Chinese" Watches, Patek Philippe Museum, pp. 130/31

SOURCE • www.ARTIMOBRUSSELS.COM


PAGE 110 A Louis XV gilt bronze astronomical mantel clock of eight-day duration, signed on the case below the white enamel dial Inv. ${ }^{\text {\& }}$ \& Fecit Millot AParis, c. 1760 . The scrolled-shaped case, surmounted by Apollo as the Sun God seated amid flowers and foliage. The enamel dial with a moon phase aperture above XII o'clock and seven other calendar apertures within the dial. - Height: 55 cm . - The maker, Pierre Millot (b. c. 1719 d after 1785) was born at Converpuis near Joinville. By 1742 he was working in Paris as a compagnon and was then received as a maitre-horloger on 1 August 1754 by a decree. Working from rue Saint-Dominique he enjoyed
the patronage of many of the leading figures of his day, not least the King himself but also that of M. Dejean the marquis de Beringhem, the duc d'Aumont as well as the duc and duchesse de Chevreuse, while today some of his works remain in important private collections and at Schloss Nymphenburg, Munich. He appears to have delighted in complicated movements and chus in addition to those wish astronomical movements or equation His auccess brion clocks i.e. ones hat played musical pieces on a series of ells ac predetermined Intevals. His success brought financial rewards to the extent that Millot was the owner of a country house at lssy where Emilie Lefebre by whom har (mâtreEmilie Leetebre by whom he had Jean-Pierre-Nicolas (maitre-horloger 1785) and Therese-Emilie who married with a complicated clock, and as a result the King who pursued a passion for such mechanisms and was keen to with a complicated clock, and as a du Roi. . Literature: E. Niehüser, Die Französische Bronzeuhr, 1997, p. 200, pls. 63 and 64, illustrating two man tel clocks with similar surmounting figure but without the lion head base. J-D Augarde Les Ouvriers du Temps 1996, p. 250 notes that Millot was possibly the maker of two royal clocks described as "equation clocks, the one 1996, p. 250 notes that Millot was possibly the maker of two royal clocks described as "equation clocks, the one
solar and the other lunar, decorated with chased bronze gilt in ormolu relating to the sun and moon, with attribsolar and the other lunar, decorated with chased bronze gilt in ormolu relating to the sun and moon, with attrib-
utes of Apollo and Diana..." These were set on pedestals by Gilles Joubert and placed in the King's bedchamber utes of Apollo and Diana... These were set on pedestals by Gilles Joubert and placed in the Kings bedchamber
at Versailles 31 st May 1763. During the Revolution in 1792 they were transported to the Tuileries but nothing at Versailles 31 st May 1763. During the Revolution in 1792 they were transported to the Tuileries but nothing
is known of their whereabouts since their acquisition by the Ministere de l'Interieur. A later inventory notes that is known of their whereabouts since their acquisition by the Ministere de linterieur. A later inventory notes that
the second clock (with case representing Diana's attributes) was a planetary clock (according to the Ptolemaic system). Given the similarity in the description of the first royal clock and the present example it is possible that they are one and the same. It is known that in 1764 Millot supplied a clock to the King for the grand salon at Chateau de La Muette (the royal hunting lodge in the Bois de Boulogne, favoured by Louis XV to house his mistresses). Two years earlier Millot presented two of his new clocks to the Académie des Sciences.
source • www.reddingantiques.ch
page 112 A Directoire mantel clock, a so-called pendule 'Au bon Sauvage', signed on the enamel dial J.S. Deverberie Cgnie Rue des Fossé de Temple No 47, c. 1790. The ormolu and patinated bronze case features a female figure symbolising America, portrayed by a negress with a gilt head-dress and an alligator at her feet. The enamel dial has Arabic hour divisions, typical of the Directoire period. The movement of eight-day duration has anchor escapement, silk thread suspension, striking on the hour and half hour on a single bell, with outside count wheel. Height: 49 cm . ${ }^{\circ}$ The maker, Jean-Simon Deverberie, was established in rue Barbette in Paris. At the end of the 18th century he introduced this type of clock, called $l$ Americaine, which was copied by many other clockmakers and formed part of a tradition of depicting the unspoilt savage, corresponding to Rousseau's philosophy.
source • www.vandrevenantiques.com

page 114 A gold and pearl-set duplex pocket watch, signed and numbered Bovet, London No.274, c. 1820. The enamel dial is attributed to Jean-François-Victor Dupont, Geneva. The latter was famous for his portraits of eminent personalities (King George IV, Henry VI among others), as well as decoration of watches and boxes for the Chinese market. He worked frequently with Ilbery, Piguet \& Meylan, Rochat Frères and others. Examples of his work can be found in museums, notably Geneva's Patek Philippe Museum.
SOURCE • www.somlo.com

page 116 A Louis XVI rack clock, signed on the enamel dial Mosbrucker à Saverne, c. 1780. The gilt brass clock is positioned on a circular wooden base and covered by a glass dome. The dial is set in an elaborate gilt brass bezel. The movement has verge escapement and a short pendulum. The day-going clock is wound by pushing it downwards along the rack, after which it climbs up again. - Height: 30 cm . - The maker, Antoine Mosbrucker, was a clock and watchmaker in the last quarter of the eighteenh century. He was established in Saverne, which about 40 km northwest of Strasbourg and was known for making rack clocks. Note: A similar clock by Mosbrucker is in the collection of the British Museum. - Literature: Tardy, Dictionnaire des Horlogers Francais, Paris, 1971, p. 477; B. Loomes, Watchmakers and Clockmakers of the World, London, 2006, p. 554.
source eqwyw yandreyenantioues.con

PAGE 118 A French mantel clock, signed on the enamel dial Louia Waltrin A PARIS, c. 1785. The oval-shaped white marble case is modelled as a balloon. The two Montgolfier brothers, modelled in chased and gilt bronze, are standing in the white marble gondola. The moulded oval white marble base is surmounted by a pierced frieze of geometric motifs; it is raised upon six toupie feet. • In June 1783, Joseph and Jacques-Etienne Montgolfier made their first flight in a hot-air balloon, observed by a huge crowd. They repeated this exploit several months later before Louis XVI and Marie-Antoinette. This extraordinary invention immediately captured the imaginations of artists and artisans of the day, especially Parisian clockmakers. Within just a few years, several variations of "Montgolfière" clocks were produced, some without the figures of the two famous balloon pilots. Several examples of the latter type are known; they include one example in the Musée François Duesberg in Mons and a second example that is illustrated in E. Niehüser, Die französische Bronzeubr, Munich, 1997, p. 256, fig. 1160. The present example features the two Montgolfier brothers in the gondola. ${ }^{\circ}$ Height: 34 cm . - The maker, Louis Waltrin, (1749-after 1820), the son of clockmaker Joseph Waltrin (circa 1720-1789), probably learned the art of clockmaking in his father's workshop in the rue Saint-Antoine. He acquired his lettres de maîtrise as a master's son on September 24, 1771. He quickly gained renown among the important Parisian collectors of the day, taking over his father's business in the mid-1780s. Several probate inventories of the late 18th and the early 19th centuries mention his work, particularly that of the wife of Jean-Baptiste-Hubert Lemarcis, and that of Antoine-François Boula de Montgodefroy, senior member of Parliament. After 1815, and the Bourbon Restoration, Louis-René Waltrin continued his career, being named 'Clockmaker to the Duke of Bordeaux'.

SOURCE • www.LAPENDULERIE.FR
PAGE 120 A brass table sundial, made by Johann Engelbrecht in Beraun (Bohemia) in the second half of the 17 th century. The foldable gnomon has a plumb bob with latitude scale so that the instrument can be positioned with three screws and used in different locations. The time is indicated by the shadow of the gnomon on the outer scale which has quarter-hour divisions. The curves show the height of the sun. • The maker, Johann Engelbrecht was active in Beraun near Prague. There are several of his sundials in museums, for instance in the Kunsthistorisches Museum Wien. His son Johann II followed in his footsteps. - Literature: J. Abeler, Meister der Uhrmacherkunst, Wuppertal, 2010, p. 137; E. Zinner, Astronomische Instrumente, München, 1972, p. 87.
SUURCE • wwww.crinns.com
page 122 A gold, enamel and pearl-set musical automaton watch, called The Theatre, made for the Chinese PAGE market. A couple is dancing in a Chinese pagoda while two Chinese musicians play their instruments. The band market. A couple is dancing in a Chinese pagoda while two Chinese musicians play their instruments. The band is decorated with sixteen enamelled and pearl-set panels with flowers. - Provenance: Time Museum in Rockford,
Illinois, USA. $~ N o t e: ~ A ~ v e r y ~ s i m i l a r ~ w a t c h ~ i s ~ i n ~ t h e ~ F o n d a t i o n ~ E d o u a r d ~ e t ~ M a u r i c e ~ S a n d o z ~ i n ~ S w i t z e r l a n d, ~ b u t ~$ missing all the enamel decorations from the band. $\cdot$ Diameter: 62 mm .

SOURCE • www aptimobausers.con
Photo Colin Crisford.

page 124 An early Swiss ebonised Pendule Religieuse, signed on the silver chapter ring Dumier ABurssin, c. 1690 The domed case has windows and sound frets to the sides The 8 -inch velvet-covered dial plate has a silver chapter ring and elaborately pierced and engraved silver spandrels and hands. The eight-day movement has a going train with verge escapement, a short pendulum and Huygen's cycloidal cheeks. The striking train indicates the hours fully on a bell and has quarter pull-repeat on two bells. - Dimensions: $44 \times 39 \mathrm{~cm}$.

SOURCE • KATS.ANTIEKEKLOKKEN.COM

page 126 A French cloisonné carriage clock for the Spanish-speaking market, signed on the dial MUIRON \& CIE, c. 1880. The faceted-glass Anglaise case is enamel-inlaid on all sides according to the cloisonné technique. It is flanked by Corinthian columns. The eight-day movement has a lever-platform escapement and grande sonnerie striking on two gongs. There is a lever in the bottom plate to select either grande sonnerie, petite sonnerie or silence. All indications are in Spanish, for instance Grande Campomeo for grande sonnerie. The enamel dial has moon phase indication below the centre of the main dial, and has subsidiary dials for the day, date, alarm. $\cdot$ Height: 21 cm .
page 128 A George III period musical bracket clock by Robert Manley, London, c. 1790. The mahogany case has a bell top and stands on four ogee brass feet The sides of the case have pierced circular sound frets, whilst the arched door is brass bound. The arched brass dial has a silvered chapter ring with a matted centre, which shows a mock-pendulum aperture and a silvered signature segment signed Robert Manley Londen. The triple-fusee movement of eight-day duration has a finely engraved back-plate with the maker's signature. The clock strike the hours on a bell and plays one of two tunes on a set of twelve bells, the tunes being Lovely Nancy and Harvest Home, which can be selected with a lever in the arch. • Height: 51 cm (20in). © The maker, Robert Manley, was active in the last quarter of the eighteenth century. - Literature: B. Loomes, Watchmakers and Clockmakers of the World, London, 2006, p. 505.
page 130 A Dutch barometer, signed on the register plate, P.S WAST Fecit Amsteldam and signed and dated on the thermometer scale, 1756. THERMOMETER Door $P^{s}$. WAST. Amsteld. The burl walnut-veneered partly oak and partly pine case has silvered brass register plates. The barometer scale is divided into imperial inches, with a ' 36 -schaal' derived from it, and Rhineland inches with a sliding setting hand. The thermometer in front of the barometer tube can be slid upwards and has scales in degrees Réaumur and Fahrenheit. In addition unusual temperatures are indicated next to the Fahrenheit scale: 'Utregt 9 Iuly 1733.' ( $+92^{\circ}$ ), 'Amst 27 Iuly 1750.' ( $+90^{\circ}$ ), 'Op zee onder de Linie 6 Maart $17522^{\prime}\left(+86^{\circ}\right)$, 'Batavia 12 Iuly $1752 .^{\prime}\left(+83^{\circ}\right)$, 'Batavia 17 Ian. $17533^{\prime}\left(+78^{\circ}\right)$, 'Aan
 $\left(+18^{\circ}\right)$, 'Parys $1740 .{ }^{\prime}\left(+9^{\circ}\right)$, 'Amst. 9 Feb. $17555^{\prime}{ }^{\prime}\left(+6^{\circ}\right)$, 'Parys 7 Feb. 1754. . $\left.^{( }+5^{\circ}\right)$, 'Amst. 11 Ian. $1740^{\prime}\left(-2^{\circ}\right)$ and 'Upsal 1740 . ( $-11^{\circ}$ ). ${ }^{\circ}$ The maker, Paulus Wast (1721-1784), was born as Paolo Quasti in Bern in 1721. In 1741, he settled in Amsterdam as an apprentice to Frans Primavesi in the Dijkstraat. Around 1750 Paolo Quasti must have started his own business and around the same time he probably changed his name to Paulus Wast, judging from the signatures he used on his barometers. On 21 November 1758, he advertised in the Amsterdamsche Courant. He became one of the most eminent makers in The Netherlands, later in cooperation with his sons. On 8 September 1784 Paulus Wast was buried in the Oude Kerk in Amsterdam.
source • www.fontinantiek.com


PAGE 132 A spring-driven bracket clock, signed both on a silvered cartouche in the arch and the backplate Nicolas De Beefe A Malines, c. 1740. The stained-cherrywood case has a drawer in the moulded base, holding the original winding key. The 8 -inch arched dial with mask-and-scroll spandrels, foliate engraved centre has a date aperture and central alarm disc, strike/silent lever at XII (sonne/silence). The eight-day movement is driven by springs in spring barrels and has verge escapement, Dutch striking on two bells differing in pitch, the alarm acting on the larger bell. The backplate is engraved with foliate scrolls, winged musicians and signed in a cartouche. Hecaight the official Clockmaker to the City of Mechelen from 1741 to 1763. He came from the illustrious De Beefe (or De Befve) family of clockmakers from Liège.

Page 134 An unusual size, silver gilt, enamelled harp with a watch movement, the movement signed and numbered Johan Georg Hofer in Wien, nr. 1183, c. 1825. The stem of the harp is mounted with twisted agate, all parts being decorated with romantic scenes in painted enamel. The watch movement is placed in the bottom piece, the dial and front in champlevé enamel technique. - Height: 17.5 cm . ${ }^{\circ}$ The maker, J.G. Hofer was active in Vienna the first quarter of the 19th century. Literature: Jurgen Abeler, Meister der Uhrmacherkunst, p. 287.

## SOURCE • www.dekKerantiquairs.com

page 157 A universal equatorial Augsburg-type sundial, signed Nicolas Bion AParis, c. 1700. The engraved dial is made of brass, steel, and glass. • Dimensions: $8.6 \times 8.1 \times 1.5 \mathrm{~cm}$. ${ }^{\circ}$ The maker, Nicolas Bion ( $1655-1733$, was the King's engineer for mathematical instruments. He published several books on the subject. • Source of Entry: Museum of the former Institute of the History of Science and Technology, Leningrad, 1947. (formerly in the Study of Peter the Great).

PAGE 159 This clock belongs to the category of clocks related to the invention of the pendulum clock by Christiaan Huygens, which made the construction of accurate clocks possible. Hoevenaer was well aware of this and included a seconds dial on the dial. Before Huygens' invention clocks were so irregular that a seconds dial was not much use. This clock is one of the first clocks with a useful seconds dial. It was probably made for precise astronomical measurements, but so far no evidence has been found of this clock belonging to the Leiden Observatory. P The case of the clock is a twentieth century addition, probably because the original case was broken. The brass dial plate is covered with burned styrax. The central brass chapter ring indicates the minutes (1-60) in anti-clockwise direction. There are four subsidiary brass rings inside the central ring. In the top ring the seconds are indicated ( $5-60$, with second division), also rotating anti-clockwise. On the left-hand ring the date (1-31) is indicated and has a day aperture within its surround. The right-hand ring indicated the moon phase whilst the hand shows the moon date (two times 1-291/2). The bottom ring is an hour chapter ring (I-XII), with half hour division. The signature cartouche is an integral part of the lower pierced and engraved spandrels and is marked Anthonius Hoevenaer Fecit Leijdae. The weight-driven movement of day duration has a going train with five wheels and a striking train with four wheels. The count-wheel striking train indicates the hours on a bell, five wheels and a striking train with withr wheels. The count-wheel striking train indicates the hours on a beell thread-suspended pendulum has a length of approximately 25 cm , the length of a so-called half-seconds pendulum, which makes it easy to show the seconds. * For the maker see Horological Desk Diary 2014, pp. 140-41. © Literature: C.A. Grimbergen, The evolution of the Dutch clock, Zaandam, 1991, pp. 16, 17; Hans Hooijmaijers, Telling Time, Devices for time measurement in Museum Boerhaave; Leiden, 2005, p. 18; J. Zeeman, De Nederlandse Staande Klok, Assen, 1977, pp. 265-267. • Museum Boerhaave inventory number 9615.

PAGE 161 A cartel clock with matching bracket, made c. 1730. The Boulle case is richly decorated with ormolu appliques, such as caryatides and scroll ornaments and is surmounted by a figure representing Fame. In the Boulle marquetry flowers. dancers and musicians can be seen. Below the twelve-piece dial there are the three fates, symbolising the fileuses du temps (spinners of the thread of life). The eight-day three-train movement has a going train with short pendulum and quarter striking on two bells differing in pitch. - Height: 140 cm .

## OURCE • www.MHL-MONTS.CH

Page 163 An early Dutch electrical longcase regulator, signed on the glass dial F. C. de Jong AMSTERDAM This is the oldest electrical clock known from the Netherlands. It is most remarkable that the pendulum drives the movement, which in its turn is kept moving by one impulse per two oscillations. This works as follows: a small weight drops and the impulse this causes is transferred via a spring to the pendulum. The weight is then returned to its original position by an electromagnet. In devising this system De Jong was inspired by the Froment pendulum which is also kept in motion by a spring. The advantage of this system is that the intensity of the impulse is independent of the electrical current. This results in the pendulum having an extremely regular swing. As the impulse takes place at the moment when the pendulum is moving at its greatest velocity, the pendulum has optimal freedom of motion. The clock has a seconds pendulum with gridiron compensation and a 16 kg bob, which causes the pendulum to remain in motion for a long time. - Height: 34 cm . - The maker, F. C de Jong(1826-1876), was a watchmaker in Amsterdam. An experimental version of his clock was exhibited at a metal fair in The Hague in 1863. The present clock was displayed at an exhibition in the Paleis voor Volksvilit in Amsterdam. In 1868 De Jong was commissioned by the Amsterdam Council to design a public electrial clock sytur this erlands. His design was, however, rejected by the council. Apart from clock movements De Jong also developed his own type of battery.

Source • www.mnuurwerk.nl
PAGE 165 A double-faced pocket watch with triple complication, signed on the enamel dial PATEK, PHILIPPE \& CIE GENEVA, SWITZERLAND, made in 1914/15. The keyless-winding and setting pocket watch, featuring mean time (on the first dial, concentric hours and minutes, and a subsidiary seconds dial at 6 o'clock) has the following nine horological complications. On the main dial $1 / 5$ seconds chronograph (released by the round push-piece located on the winding-crown); safety bolt locking the chronograph's functions (slide at 11 o'clock); split-seconds (released by the rectangular push-piece located on the case-band at 10:30); and a 30 -minute recorder (subsidiary dial at 12 o'clock): the dial on the other side has instantaneous perpetual
calendar, date of the month (subsidiary dial at 6 o'clock); day of the week (subsidiary dial at 9 o'clock;); month of the year (subsidiary dial at 3 o'clock; age and phases of the moon (subsidiary dial, graduated from 0 to $291 / 2$, and aperture at 12 o'clock), all indications in English. Finaly the watch has a minute-repeater on two gongs (released by the slide located on the case-band, on the left side of the pendant). The case is made in yellow gold, a so-called round bassine, double-face, lunettes larges-shaped; engine-turned case band and bezels. The main white enamel has black painted suspended Breguet numerals and blued steel poire (pear-shaped) hands; blued steel counter balanced seconds-hand. The white enamel dial on the other side has blued steel hands. The 19 "' movement is rhodium plated, with straight-line equilibrated lever escapement, compensated balance and blued steel balance spring with terminal curve ( 18,000 vibrations per hour). ${ }^{\circ}$ Diameter: 52 mm . ${ }^{\circ}$ The makers, Antoni Patek, who originally came from Poland, and Frenchman Adrien Philippe, the inventor of the keyless winding mechanism, joined forces in 1851 . The company, Patek Philippe \& Co is still one of the leading watchmaking companies in Geneva today.
uniform as possible. It is probable that Harrison, who had moved to London by this time, had some help in making parts of H 2 . Because he discovered a design fault with its balances, Harrison never allowed H 2 to be tested Royal under the conditions of the longitude prize

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The Museum Boerhaave is the Dutch National Museum of the History of Science and Medicine. It is located in the centre of Leiden, the town south of Amsterdam where the first Dutch university was founded. The collection contains a number of historically important instruments. For example clocks directly linked to the inventor of the pen- $\mathrm{D}^{2}$ 回 dulum clock, Chris- wis 流 tiaan Huygens, as well as regulators used in the observatory of Leiden between 1670 and 1970 .

Museum Boerhaave, Lange St. Agnietenstraat 10, 2312 WC Leiden. WWW.MUSEUMBOERHAAVE.NL


ANTHONIE HOEVENAAR LEIDEN
Early Dutch wall clock with seconds dial, c. 1670-75. Height: 31 cm .
sCan Qr-Code or see picture notes for more details on this object



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Double-faced pocket watch, c. 1915. Diameter: 52 mm . sCan Qr-Code or see picture notes for more details on this object

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JOHN HARRISON LONDON/BARROW UPON HUMBER
Marine timekeeper, 1739. Height: c. 70 cm .
SCan QR-Code or see picture notes for more details on this object



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The collection of the SMAT foundation comprises national and international clocks and watches and is temporarily in depot in anticipation of the establishment of a new "TIME" museum. A small part of the clock collection is exhibited in the Dutch Clock and Watch Museum in Zaandam. The oldest (known) existing "Musical Turret Clock" in the Netherlands, signed Vabrie, is on loan and exhibited in Museum Speelklok in Utrecht. The (extensively) "illustrated" file catalogue of the collection of the Dutch watches, written by John Beringen, is now available at:

> Stichting Museum en Archief van Tijdmeetkunde (SMAT),
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## Lantern Clocks \& Their Makers

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