

WEEKLY SUMS OF THE DAILY RATES

OF

CHRONOMETERS,

Selected for Purchase by the Board of Admiralty, in the month of August, 1841,

DURING THEIR TRIAL

AT

THE ROYAL OBSERVATORY, GREENWICH.

WITH

AN ABSTRACT OF THE PRINCIPAL CHANGES OF RATE.

1851, June 17.
Gift of the
Royal Observatory, Greenwich.

WEEKLY SUMS OF DAILY RATES OF CHRONOMETERS SELECTED FOR PURCHASE,

WHILE ON TRIAL AT THE ROYAL OBSERVATORY, GREENWICH, 1841.

Name of Chronometer.	WEEKLY SUMS OF DAILY RATES.															
	Jan. 9-16	Jan. 16-23	Jan. 23-30	Jan. 30-Feb. 6	Feb. 6-13	Feb. 13-20	Feb. 20-27	Feb. 27-Mar. 6	Mar. 6-13	Mar. 13-20	Mar. 20-27	Mar. 27-Apr. 3	Apr. 3-10	Apr. 10-17	Apr. 17-24	Apr. 24-May 1
Lithland and Davies, 1571					-27.4	-20.3	-31.0	-30.0	-25.9	-20.3	-30.4	-29.5	-26.2	-25.6	-22.4	-23.7
Dent, 1571					+10.2	+8.7	+4.1	+4.1	+9.3	+6.7	+8.8	+11.0	+11.5	+13.4	+14.1	+13.8
E. Massey, 1					+9.0	+9.7	+7.3	+7.3	+12.0	+8.1	+9.7	+7.5	+5.3	+5.3	+7.0	+8.2
Carter, 216					+9.7	+9.5	+10.0	+13.6	+10.2	+20.0	+22.4	+10.2	+17.6	+18.1	+21.7	+14.9
Arnold, 1574					-3.7	-5.5	-8.4	-5.9	-1.9	-5.0	-7.2	-4.7	-3.5	-5.1	-5.4	-4.9
Carter, 380					+5.0	+5.0	+1.4	+2.8	+8.7	+8.4	+10.5	+13.0	+14.8	+16.6	+17.1	+17.4
Parkinson and Frodsham, 2623					+0.3	+0.7	+0.7	+8.3	+8.7	+1.6	+4.0	+0.6	+5.6	+2.2	+5.5	+1.8
Fletcher, 650					+10.4	-18.4	-19.4	-24.6	-19.0	-25.9	-27.2	-29.0	-34.3	-30.0	-25.1	-24.1
Muston, 650 P.					+10.5	+18.3	+16.0	+10.2	+20.4	+19.0	+20.1	+22.5	+20.8	+21.8	+21.8	+17.5
Lithland and Davies, 1571					-29.0	-28.0	-32.7	-30.0	-40.4	-35.2	-30.9	-39.2	-38.5	-30.4	-36.0	-32.6
C. Frodsham, 1590					-24.3	-14.7	-14.6	-24.9	-30.4	-24.7	-33.4	-21.4	-21.2	-20.6	-19.6	-20.2
Birchall, 308					+13.7	+10.6	+6.0	+6.6	+16.3	+10.2	+8.8	+13.4	+9.9	+10.8	+11.5	+11.8
C. Frodsham, 1680					-20.7	-19.3	-22.3	-28.2	-27.6	-19.5	-19.1	-16.8	-17.5	-16.7	-15.7	-15.0
Cribb, 53					0.0	6.4	8.1	12.3	21.5	-14.1	-14.4	-9.8	-7.8	-11.7	-7.8	-5.2
Molyneux, 2119					-1.2	-1.0	-10.4	-9.4	+1.2	+0.3	+2.6	+7.8	+6.1	+8.4	+5.8	+3.2
Parkinson and Frodsham, 571					0.0	-6.5	-14.1	-19.1	-13.4	-9.6	-7.7	-6.6	-7.4	-10.3	-11.9	-15.7
Hewitt, 942					-14.9	-14.9	-16.9	-15.9	-10.9	-12.1	-9.4	-13.8	-13.7	-11.1	-10.0	-7.6
Des Granges, 46					-18.3	-20.5	-24.0	-21.4	-29.3	-32.5	-32.5	-33.1	-32.2	-31.0	-30.3	-37.4
Molyneux, 2285					-23.7	-24.9	-27.5	-21.4	-15.3	-20.2	-21.3	-12.9	-14.7	-17.6	-17.4	-19.3
Hewitt, 897					-2.8	-6.2	-5.5	-7.7	-4.5	-6.2	-4.3	-8.8	-10.4	-9.1	-8.2	-9.0
Parkinson and Frodsham, 2024					-4.6	-0.8	-1.4	-13.5	-10.9	-7.0	-13.2	-12.7	-10.6	-7.5	-6.0	-6.2
Cribb, 51					-6.8	-5.3	-7.5	-16.3	-16.4	-8.2	-12.1	-11.6	-6.2	-3.8	-2.2	+0.2
Hewitt, 929					-5.3	-7.4	-14.9	-10.8	-7.5	-13.3	-13.5	-14.5	-17.1	-15.4	-15.4	-15.0
Dent, 1695					-3.0	+2.4	+6.6	+0.1	-11.9	+6.3	+3.7	+7.3	+6.0	+5.8	+1.6	+2.5
Parkinson and Frodsham, 5021 P.					+9.2	+8.9	+5.3	+5.1	+9.8							
E. J. Massey, 105					-18.7	-17.7	-28.8	-20.2	-14.9	-18.1	-24.7	-16.2	-23.0	-25.8	-24.1	-25.1
Carter, 345 P.					+4.0	+8.0	+1.2	-29.7	-7.7	-6.5	-1.6	-0.7	+14.9	+9.9	+5.5	+4.0
Carter, 154					-20.0	-22.0	-19.0	-29.7	-17.7	-15.1	-11.4	-9.0	-8.0	-7.8	-4.7	-0.4
Hewitt, 405 P.					-7.2	-11.0	-10.0	-16.8	-33.8	-42.6	-43.5	-30.3	-32.1	-17.7	-16.0	-9.2

WEEKLY SUMS OF DAILY RATES.															
Apr. 24-May 1	May 1-8	May 8-15	May 15-22	May 22-29	May 29-June 5	June 5-12	June 12-19	June 19-26	June 26-July 3	July 3-10	July 10-17	July 17-24	July 24-31	July 31-Aug. 7	Aug. 7-14
-23.7	-21.8	-24.3	-22.1	-24.2	-25.1	-22.4	-19.6	-22.7	-21.2	-20.2	-18.9	-19.7	-17.9	-18.1	-16.5
+13.6	+14.8	+14.5	+18.0	+13.1	+13.1	+18.6	+19.6	+18.8	+18.8	+18.2	+19.6	+19.0	+19.6	+20.3	+19.8
+3.8	+4.8	+4.1	+7.2	+1.1	-0.7	+7.2	+8.6	+5.7	+7.0	+7.4	+11.4	+9.8	+10.7	+10.4	+11.0
+14.2	+16.5	+15.4	+16.8				+6.3	+5.2	+6.3	+7.4	+13.4	+13.3	+14.2	+14.9	+16.0
-0.1	+2.3	+1.9	+6.3	+2.9	+3.9	+7.1	+10.8	+8.7	+10.7	+11.9	+12.4	+14.5	+15.2	+14.0	+15.2
+16.4	+10.3	+18.8	+20.8	+15.4	+10.9	+21.1	+22.2	+20.7	+20.8	+19.9	+23.3	+24.1	+23.2	+24.5	+24.0
+5.1	+2.3	+1.9	+5.0	+0.1	+0.3	-3.8	-2.7	-1.9	-1.9	-2.3	-7.9	-10.6	-9.7	-7.0	-7.3
-23.4	-19.3	-19.8	-17.6	-23.5	-25.1	-17.6	-18.7	-16.8	-18.8	-14.5	-14.6	-15.0	-14.1	-12.5	-12.6
+10.8	+13.0	+15.7	+20.2	+19.8	+10.6	+11.6	+10.2	+11.5	+7.6	+13.1	+9.9	+10.2	+9.8	+10.9	+10.4
-32.6	-30.1	-28.9	-24.8	-32.0	-28.5	-23.9	-21.0	-22.9	-21.1	-23.0	-18.6	-19.7	-20.7	-19.0	-18.6
-20.9	-19.8	-20.9	-16.8	-23.8	-24.5	-21.4	-19.8	-20.8	-20.8	-22.2	-21.1	-20.8	-19.4	-18.6	-19.4
+10.5	+12.6	+13.4	+16.0	+11.7	+12.4	+16.8	+18.0	+17.8	+21.0	+21.1	+23.0	+23.5	+23.7	+23.3	+24.2
-14.1	-14.9	-15.8	-11.7	-14.0	-14.0	-6.4	-7.4	-11.6	-13.0	-9.6	-8.6	-8.3	-9.2	-8.3	-8.4
+6.1	+5.4	+4.5	+5.8	+1.8	-1.5	+3.1	+3.2	+2.8	+2.8	+4.4	+4.6	+3.9	+6.1	+7.5	+6.8
+3.5	+4.3	+4.5	+5.8	+1.8	-1.5	+3.1	+3.2	+2.8	+2.8	+4.4	+4.6	+3.9	+6.1	+7.5	+6.8
-18.4	-18.6	-19.1	-15.5	-22.6	-22.4	-14.7	-14.1	-18.4	-16.9	-16.1	-16.8	-18.7	-18.9	-20.3	-17.9
-14.5	-13.6	-14.1	-9.9	-15.9	-10.3	-8.4	-6.8	-10.3	-7.8	-8.0	-2.6	-3.1	-1.7	-0.4	-0.2
-37.6	-38.4	-36.8	-31.0	-40.0	-39.1	-31.3	-34.2	-30.0	-29.8	-30.0	-30.7	-32.6	-32.6	-30.4	-38.1
-10.1	-10.9	-10.9	-10.7	-21.4	-24.5	-25.0	-23.8	-23.9	-23.6						
-15.0	-14.9	-17.2	-14.7	-24.8	-29.5	-16.9	-15.8	-19.3	-19.2	-21.6	-16.6	-16.5	-15.4	-16.3	-15.7
+3.0	+0.1	+1.5	+1.8	+0.6	+1.5	+2.6	+3.3	+4.1	+3.7	+2.8	+3.6	+3.5	+3.2	+2.2	+1.6
+1.3	+3.4	+3.5	+3.2	+4.8	+6.9	+9.8	+10.7	+9.7	+7.5	+9.8	+9.1	+8.7	+9.7	+8.8	+9.1
-13.7	-12.9	-13.5	-9.2	-17.3	-16.5	-5.0	-5.2	-6.4	-3.9	-2.0	+3.3	+3.2	+2.6	+6.0	+7.3
-13.0	-11.9	-11.6	-2.8	-3.0	-0.8	-4.4	-3.8	-3.8	-7.7	-9.8	-11.2	-10.8	-12.6	-11.0	-9.5
+17.9	+22.3	+21.5	+28.5	+22.9	+28.8	+28.1	+29.5	+29.3	+27.0	+21.4	+31.1	+30.0	+34.1	+37.4	+38.2
-15.6	-15.5	-16.5	-14.5	-13.6	-13.2	-11.8	-9.7	-10.4	-7.7	-7.7	-9.6	-6.8	-8.1	-8.9	-10.0
-7.0	-12.2	-12.9	-8.7	-24.3	-24.8	-10.7	-12.1	-9.3	-8.5	-15.2	-10.5	-9.8	-10.5	-9.8	-15.7
-1.6	-1.8	+12.4	+13.8												
-9.5	-10.2	-8.6	-3.7	-10.6	-14.1	-2.6	-1.6	-3.4	-5.0	-10.6	-4.1	-6.8	-7.8	-8.6	-7.8

From January 16 to March 18, the Chronometers Carter 216 and Carter 154 were exposed to the open air on the outside of a North
 sums during the latter period were altered about 60°; these are omitted in the abstract. Molyneux 2285 was stopped on July 3,
 April 23: it was set going again without repair: the weekly sum from April 17 to April 24 is omitted. Dent 5021 P was stopped on

window, and from May 22 to June 12, the same Chronometers were subjected to a high temperature in a hot closet: their weekly
 by the breaking of its main-spring: a new spring was inserted and the rating continued. Dent 1606 was found stopped on
 February 23, by the breaking of its main-spring: a new spring was inserted and the rating continued.

ABSTRACT OF THE PRINCIPAL CHANGES OF RATE.

Name of Chronometer.	First Day of First Week of Rating.	Last Day of Last Week of Rating.	No. of Weeks.	Least Weekly Sum.	In what Week.	Greatest Weekly Sum.	In what Week.	Difference between greatest and least.	Greatest diff. between one Week and the next.	Before and after what Day.
Litherland and Davies ⁹¹⁵ ₁₈₂₇₉	Feb. 6	Sep. 4	30	-31.0	Feb. 20 to 27	-15.5	Aug. 7 to 14	15.5	4.1	Mar. 6
Dent 1571	Jan. 16	Sep. 4	33	+ 4.1	Jan. 30 to Feb. 6 & Feb. 6 to 13	+20.3	July 31 to Aug. 7	16.2	5.2	Feb. 13
E. Massey 1	Jan. 16	Sep. 4	33	- 1.1	May 22 to 29	+12.0	Feb. 13 to 20	13.1	8.3	May 22
Carter 216	Jan. 16	Sep. 4	30	+ 5.2	June 19 to 26	+22.4	Feb. 27 to Mar. 6	17.2	7.9	Apr. 24
Arnold 1474	Jan. 16	Sep. 4	33	- 8.4	Jan. 30 to Feb. 6	+16.4	Aug. 28 to Sep. 4	24.8	4.5	May 15
Carter 380	Jan. 16	Sep. 4	33	+ 1.8	Jan. 30 to Feb. 6	+24.9	Aug. 7 to 14	23.1	5.9	Feb. 13
Parkinson and Frodsham . . . 2523	Jan. 9	Sep. 4	34	-13.3	Mar. 27 to Apr. 3	+ 5.6	Mar. 6 to 13	18.9	8.2	Mar. 27
Fletcher 660	Jan. 9	Sep. 4	34	-34.3	Mar. 13 to 20	-11.5	Aug. 21 to 28	22.8	6.4	Feb. 20
Muston 685 P	Jan. 16	Sep. 4	33	+ 5.1	Aug. 14 to 21	+22.5	Mar. 6 to 13	17.4	9.4	May 22
Litherland and Davies ⁹²¹ ₁₈₂₁₃	Jan. 9	Sep. 4	34	-40.4	Feb. 6 to 13	-18.5	Aug. 7 to 14 & Aug. 28 to Sep. 4	21.9	7.2	May 22
C. Frodsham 1806	Jan. 9	Sep. 4	34	-30.4	Feb. 6 to 13	-14.6	Jan. 23 to 30	15.8	10.9	Feb. 13
Birchall 308	Jan. 16	Sep. 4	33	+ 6.0	Jan. 30 to Feb. 6	+24.2	Aug. 7 to 14	18.2	9.7	Feb. 13
C. Frodsham 1686	Jan. 9	Sep. 4	34	-28.2	Jan. 30 to Feb. 6	- 6.4	June 5 to 12	21.8	8.2	June 5
Cribb 53	Jan. 9	Sep. 4	34	-21.5	Feb. 6 to 13	- 0.7	July 17 to 24	20.8	9.2	Feb. 6
Molyneux 2119	Jan. 16	Sep. 4	33	-10.4	Jan. 30 to Feb. 6	+ 8.4	Mar. 20 to 27	18.8	10.6	Feb. 13
Parkinson and Frodsham . . . 571	Jan. 9	Sep. 4	34	-24.7	Aug. 28 to Sep. 4	0.0	Jan. 9 to 16	24.7	7.7	June 5
Hewitt 942	Jan. 16	Sep. 4	33	-19.5	May 22 to 29	- 0.2	Aug. 7 to 14	19.3	10.9	June 5
Des Granges 45	Jan. 16	Sep. 4	33	-40.3	Aug. 28 to Sep. 4	-18.2	June 16 to 23	22.1	9.8	July 3
Molyneux 2285	Jan. 16	Sep. 4	31	-38.5	Aug. 21 to 28	-12.9	Mar. 6 to 13	25.6	8.4	Mar. 6
Hewitt 897	Jan. 16	Sep. 4	33	-26.5	May 29 to June 5	- 2.8	Jan. 16 to 23	23.7	10.1	May 22
Parkinson and Frodsham . . . 2324	Jan. 9	Sep. 4	34	-15.9	Feb. 6 to 13	+ 4.1	June 19 to 26	20.0	12.1	Jan. 30
Cribb 51	Jan. 9	Sep. 4	34	-16.4	Feb. 6 to 13	+10.7	June 19 to 26	27.1	8.8	Jan. 30
Hewitt 929	Jan. 16	Sep. 4	33	-17.3	May 22 to 29	+ 7.5	Aug. 7 to 14	24.8	10.1	June 5
Dent 1606	Jan. 9	Sep. 4	33	-14.6	Aug. 21 to 28	+ 6.8	Feb. 13 to 20	21.4	12.0	Feb. 6
Dent 5621 P.	Jan. 16	Sep. 4	30	+ 5.1	Feb. 6 to 13	+38.9	Aug. 21 to 28	33.8	6.6	May 15
E. J. Massey 105	Jan. 16	Sep. 4	33	-29.2	Feb. 6 to 13	- 6.8	July 17 to 24	22.4	14.3	Feb. 13
Carter 345 P.	Jan. 16	Sep. 4	33	-24.8	May 29 to June 5	+14.9	Mar. 13 to 20	39.7	15.6	Mar. 13 & May 22
Carter 154	Jan. 16	Sep. 4	30	-29.0	Jan. 30 to Feb. 6	+13.8	May 15 to 22	42.8	14.2	May 8
Hewitt 405 P.	Jan. 16	Sep. 4	33	-43.5	Feb. 27 to Mar. 6	- 1.6	June 12 to 19	41.9	17.0	Feb. 13

G. B. AIRY.