

RATES OF CHRONOMETERS
ON TRIAL
FOR PURCHASE BY THE BOARD OF ADMIRALTY,
AT THE
ROYAL OBSERVATORY, GREENWICH.

1845.

RATES OF CHRONOMETERS ON TRIAL FOR PURCHASE BY THE ADMIRALTY,

NAME OF MAKER.	Number.	Whether Pocket, 1, 2, or 3 Days.	(I)—WEEKLY SUMS OF DAILY RATES											
			Jan. 18—25	Jan. 25— Feb. 1	Feb. 1—8	Feb. 8—15	Feb. 15—22	Feb. 22— Mar. 1	Mar. 1—8	Mar. 8—15	Mar. 15—22	Mar. 22—29	Mar. 29— Apr. 5	April 5—12
Poole	1155	2	....	+ 7.7	+ 7.6	+ 7.6	+ 5.0	+ 11.7	+ 10.3	+ 11.8	+ 8.4	+ 8.6	+ 7.5	+ 8.7
Parkinson and Frodsham..	2955	P	....	....	....	....	....	....	....	....	....	+ 14.0	+ 9.3	+ 9.4
Shepherd	441	2	....	+ 8.6	+ 6.4	+ 8.0	+ 12.9	+ 17.1	+ 14.8	+ 20.8	+ 17.8	+ 16.7	+ 16.5	+ 19.4
E. J. Massey	125	2	- 1.6	+ 1.2	- 1.3	0.0	- 4.4	- 0.2	- 4.9	+ 2.2	+ 1.0	- 1.8	- 2.5	+ 6.4
Webb, Jun.	5536	2	....	- 6.9	- 6.8	- 6.7	- 13.0	- 3.2	- 9.0	- 3.8	- 6.0	- 5.7	- 4.2	- 1.1
Parkinson and Frodsham..	1826	P	....	....	....	....	....	....	....	....	....	+ 15.0	+ 13.1	+ 10.8
Reid and Sons	1160	2	....	0.0	- 3.8	- 3.0	+ 1.1	+ 5.6	+ 7.1	+ 7.3	- 0.4	+ 4.2	+ 6.6	+ 12.8
Birchall	347	1	- 16.8	- 7.6	+ 0.2	+ 1.3	- 6.4	- 11.6	- 3.8	- 2.9	+ 1.2	- 3.7	- 2.9	- 4.5
Loseby	101*	2	....	....	(- 1.5)	(- 7.4)	[+ 0.8]	(- 9.6)	[- 6.3]	(- 12.8)	(- 15.4)	[- 3.8]	[- 9.5]	- 12.1
Dent	1797	2	....	- 4.7	- 9.3	- 11.6	- 5.6	- 6.7	- 5.3	- 9.0	+ 15.7	- 11.4	- 12.9	- 2.6
Reid and Sons	1056	2	....	- 3.4	- 4.9	- 8.0	- 6.5	- 4.1	- 0.7	- 5.1	- 9.6	+ 2.0	+ 3.4	+ 2.8
C. Frodsham	1482	2	....	- 13.2	- 17.3	- 22.5	- 17.1	- 21.5	- 15.4	- 23.2	- 27.2	- 12.4	- 16.4	- 15.8
Connell	399	2	....	+ 8.0	+ 4.0	+ 2.9	- 11.7	+ 0.7	- 9.0	+ 0.5	- 4.9	- 7.6	- 6.3	- 1.5
Parkinson and Frodsham..	2630	2	- 20.3	- 18.2	- 20.4	- 15.2	- 7.1	- 20.4	- 4.8	- 18.9	- 15.6	- 5.0	- 7.1	- 12.6
Muston	948	2	+ 3.2	+ 2.3	+ 1.3	- 1.3	+ 3.7	+ 7.0	- 2.1	+ 3.4	+ 1.6	- 4.6	- 5.5	+ 10.0
Parkinson and Frodsham..	2622	2	- 6.3	- 3.7	+ 0.1	+ 3.7	+ 12.3	- 2.7	+ 10.9	+ 0.4	+ 1.7	+ 14.9	+ 12.9	+ 2.3
Carter	345	2	....	+ 15.9	+ 13.7	+ 8.4	+ 4.9	+ 15.3	+ 9.6	+ 16.9	+ 11.2	+ 3.9	+ 4.9	+ 20.9
Appleton	484	2	....	+ 3.1	+ 2.6	+ 0.9	+ 0.6	+ 7.2	+ 4.2	+ 6.1	+ 5.1	- 1.1	- 1.4	+ 17.4
Birchall	348*	2	- 14.0	(- 1.4)	(+ 2.7)	(+ 2.9)	[+ 1.2]	(- 2.7)	[- 0.4]	(- 0.2)	(+ 1.7)	[- 1.1]	[+ 6.9]	+ 1.1
Appleton	485	2	....	- 13.2	- 15.2	- 17.2	- 14.0	- 5.5	- 10.9	- 6.8	- 11.2	- 17.2	- 17.5	- 0.2
Baker	1098	2	- 13.4	- 13.3	- 15.3	- 16.3	- 1.9	- 7.5	+ 0.8	- 13.4	- 18.9	- 3.9	- 1.2	- 2.0
Parkinson and Frodsham..	2791	2	- 7.0	- 7.7	- 12.6	- 16.4	- 0.1	- 9.5	- 0.7	- 14.4	- 20.8	- 3.6	- 7.5	- 5.3
Dixon	159	2	....	- 16.5	- 18.7	- 21.3	- 12.4	- 18.1	- 7.3	- 15.2	- 18.0	- 4.6	- 8.0	- 8.6
Dent	1828	2	....	+ 17.2	+ 16.1	+ 16.0	0.0	+ 16.9	+ 0.4	+ 22.5	+ 20.3	+ 1.2	+ 0.2	+ 24.0
Norris and Campbell	474	2	....	- 28.1	- 32.0	- 28.1	- 14.8	- 15.4	- 8.9	- 8.1	- 9.6	- 6.5	- 3.7	+ 0.7
C. Frodsham	1481	2	....	- 25.4	- 31.9	- 32.9	- 13.0	- 22.7	- 9.8	- 24.1	- 29.5	- 9.8	- 13.8	- 17.0
Fletcher	846	2	....	- 9.4	- 9.4	- 12.9	- 15.0	- 6.7	- 12.7	- 7.8	- 13.1	- 24.9	- 29.1	- 8.0
Hewitt	1110	2	- 26.6	- 27.0	- 27.2	- 27.6	- 21.5	- 18.9	- 23.5	- 30.3	- 45.9	- 35.0	- 35.0	- 14.0
Loseby	104*	2	....	....	(+ 1.7)	(+ 3.5)	[- 28.6]	(- 2.1)	[- 29.4]	(+ 5.5)	(+ 5.0)	[- 18.1]	[- 20.1]	+ 0.3
Cotterell and Co.	$\frac{9.3.2}{26.2.5}$	2	+ 9.7	+ 15.6	+ 22.3	+ 29.0	- 2.6	+ 15.8	- 2.5	+ 27.8	+ 31.4	+ 2.6	+ 5.1	+ 2.1
Parkinson and Frodsham..	2792	2	- 7.6	- 9.5	- 13.1	- 14.8	+ 16.0	+ 0.5	+ 19.4	- 1.4	- 5.1	+ 23.5	+ 24.4	+ 15.7
C. Frodsham	1516*	2	....	....	....	....	....	[ - 39.4]	(- 54.2)	(- 65.3)	[- 72.7]	[- 83.5]	- 76.5	
C. Frodsham	1540*	2	....	....	....	....	....	[ - 10.9]	(- 3.5)	(+ 3.0)	[- 4.2]	[+ 11.3]	+ 38.7	
Cribb	67	2	....	- 33.2	- 39.8	- 51.4	- 16.9	- 10.4	- 3.7	- 1.3	- 0.3	+ 4.1	+ 3.0	+ 10.7
Chronometrical Therm.	....	..	+ 1501.8	+ 1640.7	+ 1909.5	+ 2135.8	- 546.9	+ 1260.3	- 610.5	+ 1735.0	+ 2093.6	- 1545.7	- 1461.9	+ 788.4
Range of Thermometer in Chronometer Room ..	}	..	38° to 45°	33° to 46°	32° to 39°	29° to 37°	60° to 83°	36° to 47°	60° to 84°	28° to 45°	28° to 50°	75° to 90°	74° to 90°	43° to 56°
Range of Thermometer in open air, or in heated Iron Tray, for the Chronometers marked with an Asterisk.	} ....	..	....	26° to 38°	25° to 43°	11° to 40°	65° to 112°	23° to 47°	65° to 112°	14° to 42°	22° to 47°	85° to 118°	85° to 110°	....

* These Chronometers were exposed to the open air on the north side of the building, during the weeks in which their rates are inclosed in parentheses (); and were placed near to the stove in a temperature of about 100°, during the weeks in which their rates are inclosed in brackets [].

† In these weeks the room was heated by a stove.

The rate given by the first week's trial is in every case omitted.

IN THE ORDER OF TIME.													NAME OF M A K E R.		Number.
April 12—19	April 19—26	April 26— May 3	May 3—10	May 10—17	May 17—24	May [†] 24—31	May 31— June 7	June 7—14	June 14—21	June 21—28	June 28— July 5	July [†] 5—12			
+ 6.7	+ 8.5	+ 9.4	+ 9.3	+ 7.3	+ 9.5	+ 10.0	+ 11.9	+ 9.6	+ 11.3	+ 12.6	+ 9.0	+ 8.2	Poole.....	1155	
+ 6.4	+ 12.2	+ 12.9	+ 12.5	+ 14.6	+ 15.9	+ 12.2	+ 15.8	+ 14.3	+ 17.0	+ 19.0	+ 13.5	+ 12.8	Parkinson and Frodsham	2955	
+ 17.1	+ 16.5	+ 15.8	+ 18.4	+ 14.7	+ 13.9	+ 17.8	+ 18.8	+ 17.6	+ 16.2	+ 17.3	+ 17.3	+ 17.1	Shepherd.....	441	
+ 3.9	+ 3.7	+ 3.6	+ 7.5	+ 3.2	+ 5.9	+ 2.1	+ 6.2	+ 2.5	+ 1.7	+ 4.6	+ 4.4	+ 4.4	E. J. Massey.....	125	
- 1.2	- 3.0	- 5.4	+ 0.5	- 2.2	+ 0.8	- 5.2	- 6.2	- 5.1	- 5.3	- 4.9	- 2.0	+ 0.4	Webb, Jun.....	5536	
+ 2.0	+ 9.4	+ 8.8	+ 3.3	+ 3.9	+ 1.3	+ 11.6	+ 9.7	+ 4.5	+ 9.9	+ 11.3	+ 10.9	+ 10.2	Parkinson and Frodsham	1886	
+ 12.1	+ 15.8	+ 15.8	+ 14.8	+ 13.4	+ 14.0	+ 8.7	+ 14.3	+ 14.2	+ 12.5	+ 15.6	+ 10.0	+ 8.4	Reid and Sons.....	1160	
- 5.8	- 1.0	- 3.5	- 4.0	- 5.2	- 3.0	- 1.8	- 0.6	- 0.6	- 0.2	+ 1.4	- 2.3	- 2.1	Birchall.....	347	
- 14.0	- 14.6	- 14.7	- 11.0	- 12.2	- 12.0	[- 3.8]	- 14.7	- 14.5	- 11.8	- 9.8	[- 2.6]	[- 3.3]	Loseby.....	101*	
- 2.4	+ 1.6	+ 1.5	+ 0.9	- 0.5	+ 0.8	- 6.0	+ 1.1	+ 0.1	- 0.2	+ 3.1	- 7.8	- 11.2	Dent.....	1797	
+ 2.8	+ 5.7	+ 5.5	+ 5.7	+ 5.2	+ 5.6	+ 5.1	+ 9.2	+ 8.5	+ 8.5	+ 10.5	+ 7.1	+ 8.0	Reid and Sons.....	1056	
- 21.7	- 19.5	- 21.2	- 20.7	- 22.1	- 19.3	- 26.0	- 16.1	- 16.9	- 22.3	- 20.7	- 25.0	- 28.9	C. Frodsham.....	1482	
- 0.7	- 7.2	- 7.3	- 1.5	- 5.4	- 3.1	- 9.5	- 9.8	- 9.4	- 8.7	- 8.6	- 7.1	- 6.9	Connell.....	399	
- 15.6	- 7.4	- 8.1	- 9.8	- 10.0	- 9.8	- 3.5	- 4.3	- 4.0	- 2.2	- 2.6	- 2.8	- 3.8	Parkinson and Frodsham	2630	
+ 11.4	+ 11.5	+ 11.6	+ 14.2	+ 13.7	+ 14.4	+ 0.9	+ 9.7	+ 10.4	+ 8.5	+ 12.9	+ 1.4	- 1.5	Muston.....	948	
- 0.8	+ 6.8	+ 4.8	- 1.2	+ 1.0	+ 2.9	+ 13.0	+ 11.1	+ 8.5	+ 10.1	+ 8.2	+ 11.5	+ 13.4	Parkinson and Frodsham	2622	
+ 22.2	+ 23.8	+ 21.4	+ 24.4	+ 22.5	+ 23.1	+ 5.6	+ 19.1	+ 18.9	+ 15.2	+ 18.9	+ 7.0	+ 4.6	Carter.....	345	
+ 15.0	+ 15.8	+ 13.9	+ 15.0	+ 11.3	+ 10.8	+ 3.7	+ 15.5	+ 14.8	+ 18.0	+ 23.1	+ 10.7	+ 8.7	Appleton.....	484	
- 0.1	+ 12.3	+ 12.3	+ 4.5	+ 6.1	+ 8.8	[+ 6.3]	+ 15.6	+ 15.2	+ 17.0	+ 18.3	[+ 9.1]	[+ 10.6]	Birchall.....	348*	
- 0.5	+ 0.8	+ 0.4	+ 3.5	+ 2.4	+ 4.9	- 10.0	+ 3.7	+ 3.8	+ 2.5	+ 7.2	- 9.6	- 9.4	Appleton.....	485	
- 0.4	+ 4.6	+ 6.4	+ 3.1	+ 1.6	+ 3.1	- 0.9	+ 10.5	+ 9.0	+ 8.2	+ 10.8	+ 5.6	+ 4.6	Baker.....	1098	
- 4.9	+ 2.7	+ 2.6	+ 0.5	+ 1.5	+ 1.0	+ 0.5	+ 3.2	+ 2.6	+ 3.3	+ 5.7	- 0.7	- 2.1	Parkinson and Frodsham	2791	
- 7.2	- 3.6	+ 0.9	0.0	+ 3.0	+ 5.1	- 7.3	+ 4.4	+ 4.7	+ 3.8	+ 6.1	- 14.6	- 17.9	Dixon.....	159	
+ 22.2	+ 16.4	+ 15.3	+ 22.3	+ 18.1	+ 20.4	+ 1.5	+ 13.1	+ 10.4	+ 9.5	+ 14.4	+ 2.5	+ 2.5	Dent.....	1628	
- 2.2	+ 1.2	+ 3.6	+ 4.5	+ 4.8	+ 5.8	+ 6.0	+ 7.3	+ 7.6	+ 10.1	+ 13.6	+ 8.4	+ 10.0	Norris and Campbell...	474	
- 21.1	- 14.3	- 6.5	- 7.4	- 6.4	- 5.4	- 2.7	+ 0.1	- 1.2	- 0.8	+ 1.0	- 2.7	- 2.9	C. Frodsham.....	1481	
- 6.8	- 5.8	- 5.5	- 0.1	0.0	+ 4.5	- 13.4	- 7.7	- 4.3	- 10.1	- 1.8	- 19.3	- 23.9	Fletcher.....	846	
- 15.3	- 11.7	- 12.0	- 8.4	- 10.7	- 8.7	- 27.5	- 14.9	- 15.0	- 17.0	- 11.5	- 27.0	- 31.7	Hewitt.....	1110	
+ 2.6	- 5.1	- 6.2	+ 4.5	- 0.2	+ 5.1	[- 10.7]	- 7.9	- 7.4	- 10.6	- 4.5	[- 4.4]	[- 4.7]	Loseby.....	104*	
- 1.0	- 13.2	- 13.4	- 6.7	- 9.6	- 5.2	- 2.7	- 4.2	- 5.4	- 2.7	- 3.6	- 1.8	+ 0.3	Cotterell and Co.....	$\frac{9.3.9}{2.6.2.5}$	
+ 13.4	+ 22.3	+ 22.0	+ 16.5	+ 17.0	+ 17.5	+ 27.3	+ 25.9	+ 25.7	+ 27.9	+ 27.4	+ 30.6	+ 32.3	Parkinson and Frodsham	2792	
- 77.1	- 70.2	- 71.0	- 69.2	- 70.1	- 68.6	[- 86.0]	- 76.5	- 75.6	- 71.4	- 68.1	[- 96.0]	[- 98.0]	C. Frodsham.....	1516*	
+ 35.5	+ 44.2	+ 43.4	+ 44.7	+ 44.8	+ 46.4	[+ 19.1]	+ 46.9	+ 50.0	+ 49.5	+ 53.3	[+ 25.6]	[+ 33.3]	C. Frodsham.....	1540*	
+ 13.0	+ 14.6	+ 13.9	+ 16.7	+ 16.7	+ 17.2	- 1.3	+ 2.7	+ 6.3	+ 4.0	+ 5.0	- 1.8	- 1.3	Cribb.....	67	
+ 1031.2	+ 315.5	+ 265.9	+ 766.1	+ 573.8	+ 689.5	- 1288.0	- 423.9	- 369.5	- 796.0	- 362.6	- 1520.0	- 1727.6			
44° to 53°	52° to 62°	54° to 60°	47° to 57°	48° to 57°	49° to 54°	74° to 88°	60° to 69°	55° to 76°	63° to 78°	61° to 71°	73° to 89°	76° to 92°			
....	....	....	....	....	....	85° to 107°	....	....	....	....	79° to 110°	85° to 106°			

* These Chronometers were exposed to the open air on the north side of the building, during the weeks in which their rates are inclosed in parentheses (); and were placed near to the stove in a temperature of about 100°, during the weeks in which their rates are inclosed in brackets [].

† In these weeks the room was heated by a stove.

The rate given by the first week's trial is in every case omitted.

RATES OF CHRONOMETERS ON TRIAL FOR PURCHASE BY THE ADMIRALTY,

NAME OF MAKER.	Number.	Whether Pocket, 1, 2, or 8 Days.	(II)—WEEKLY SUMS OF DAILY RATES AS DETERMINED BY THE											
			Feb. 8—15	Mar. 15—22	Feb. 1—8	Mar. 8—15	Jan. 25— Feb. 1	Jan. 18—25	Feb. 22— Mar. 1	April 12—19	April 5—12	May 3—10	May 17—24	May 10—17
Poole	1155	2	+ 7.6	+ 8.4	+ 7.6	+ 11.8	+ 7.7	....	+ 11.7	+ 6.7	+ 8.7	+ 9.3	+ 9.5	+ 7.3
Parkinson and Frodsham..	2955	P	....	....	....	....	....	....	....	+ 6.4	+ 9.4	+ 12.5	+ 15.9	+ 14.6
Shepherd	441	2	+ 8.0	+ 17.8	+ 6.4	+ 20.8	+ 8.6	....	+ 17.1	+ 17.1	+ 19.4	+ 18.4	+ 13.9	+ 14.7
E. J. Massey	125	2	0.0	+ 1.0	- 1.3	+ 2.2	+ 1.2	- 1.6	- 0.2	+ 3.9	+ 6.4	+ 7.5	+ 5.9	+ 3.2
Webb, Jun.	5536	2	- 6.7	- 6.0	- 6.8	- 3.8	- 6.9	....	- 3.2	- 1.2	- 1.1	+ 0.5	+ 0.8	- 2.2
Parkinson and Frodsham..	1886	P	....	....	....	....	....	....	....	+ 2.0	+ 10.8	+ 3.3	+ 1.3	+ 3.9
Reid and Sons	1160	2	- 3.0	- 0.4	- 3.8	+ 7.3	0.0	....	+ 5.6	+ 12.1	+ 12.8	+ 14.8	+ 14.0	+ 13.4
Birchall	347	1	+ 1.3	+ 1.2	+ 0.2	- 2.9	- 7.6	- 16.8	- 11.6	- 5.8	- 4.5	- 4.0	- 3.0	- 5.2
Loseby	101*	2	(- 7.4)	(- 15.4)	(- 1.5)	(- 12.8)	....	....	(- 9.6)	- 14.0	- 12.1	- 11.0	- 12.0	- 12.2
Dent	1797	2	- 11.6	- 15.7	- 9.3	- 9.0	- 4.7	....	- 6.7	- 2.4	- 2.6	+ 0.9	+ 0.8	- 0.5
Reid and Sons	1056	2	- 8.0	- 9.6	- 4.9	- 5.1	- 3.4	....	- 4.1	+ 2.8	+ 2.8	+ 5.7	+ 5.6	+ 5.2
C. Frodsham	1482	2	- 22.5	- 27.2	- 17.3	- 23.2	- 13.2	....	- 21.5	- 21.7	- 15.8	- 20.7	- 19.3	- 22.1
Connell	399	2	+ 2.9	- 4.9	+ 4.0	+ 0.5	+ 8.0	....	+ 0.7	- 0.7	- 1.5	- 1.5	- 3.1	- 5.4
Parkinson and Frodsham..	2630	2	- 15.2	- 15.6	- 20.4	- 18.9	- 18.2	- 20.3	- 20.4	- 15.6	- 12.6	- 9.8	- 9.8	- 10.0
Muston	948	2	- 1.3	+ 1.6	+ 1.3	+ 3.4	+ 2.3	+ 3.2	+ 7.0	+ 11.4	+ 10.0	+ 14.2	+ 14.4	+ 13.7
Parkinson and Frodsham..	2622	2	+ 3.7	+ 1.7	+ 0.1	+ 0.4	- 3.7	- 6.3	- 2.7	- 0.8	+ 2.3	- 1.2	+ 2.9	+ 1.0
Carter	345	2	+ 8.4	+ 11.2	+ 13.7	+ 16.9	+ 15.9	....	+ 15.3	+ 22.2	+ 20.9	+ 24.4	+ 23.1	+ 22.5
Appleton	484	2	+ 0.9	+ 5.1	+ 2.6	+ 6.1	+ 3.1	....	+ 7.2	+ 15.0	+ 17.4	+ 15.0	+ 10.8	+ 11.3
Birchall	348*	2	(+ 2.9)	(+ 1.7)	(+ 2.7)	(- 0.2)	(- 1.4)	- 14.0	(- 2.7)	- 0.1	+ 1.1	+ 4.5	+ 8.8	+ 6.1
Appleton	485	2	- 17.2	- 11.2	- 15.2	- 6.8	- 13.2	....	- 5.5	- 0.5	- 0.2	+ 3.5	+ 4.9	+ 2.4
Baker	1098	2	- 16.3	- 18.9	- 15.3	- 13.4	- 13.3	- 13.4	- 7.5	- 0.4	- 2.0	+ 3.1	+ 3.1	+ 1.6
Parkinson and Frodsham..	2791	2	- 16.4	- 20.8	- 12.6	- 14.4	- 7.7	- 7.0	- 9.5	- 4.9	- 5.3	+ 0.5	+ 1.0	+ 1.5
Dixon	159	2	- 21.3	- 18.0	- 18.7	- 15.2	- 16.5	....	- 18.1	- 7.2	- 8.6	0.0	+ 5.1	+ 3.0
Dent	1828	2	+ 16.0	+ 20.3	+ 16.1	+ 22.5	- 17.2	....	+ 16.9	+ 22.2	+ 24.0	+ 22.3	+ 20.4	+ 18.1
Norris and Campbell,	474	2	- 28.1	- 9.6	- 32.0	- 8.1	- 28.1	....	- 15.4	- 2.2	+ 0.7	+ 4.5	+ 5.8	+ 4.8
C. Frodsham	1481	2	- 32.9	- 29.5	- 31.9	- 24.1	- 25.4	....	- 22.7	- 21.1	- 17.0	- 7.4	- 5.4	- 6.4
Fletcher	846	2	- 12.9	- 13.1	- 9.4	- 7.8	- 9.4	....	- 6.7	- 6.8	- 8.0	- 0.1	+ 4.5	0.0
Hewitt	1110	2	- 27.6	- 45.9	- 27.2	- 30.3	- 27.0	- 26.6	- 18.9	- 15.3	- 14.0	- 8.4	- 8.7	- 10.7
Loseby	104*	2	(+ 3.5)	(+ 5.0)	(+ 1.7)	(+ 5.5)	....	....	(- 2.1)	+ 2.6	+ 0.3	+ 4.5	+ 5.1	- 0.2
Cotterell and Co.	$\frac{0.39}{2.625}$	2	+ 29.0	+ 31.4	+ 22.3	+ 27.8	+ 15.6	+ 9.7	+ 15.8	- 1.0	+ 2.1	- 6.7	- 5.2	- 9.6
Parkinson and Frodsham..	2792	2	- 14.8	- 5.1	- 13.1	- 1.4	- 9.5	- 7.6	+ 0.5	+ 13.4	+ 15.7	+ 16.5	+ 17.5	+ 17.0
C. Frodsham	1516*	2	....	(- 65.3)	....	(- 54.2)	....	....	....	- 77.1	- 76.5	- 69.2	- 68.6	- 70.1
C. Frodsham	1540*	2	....	(+ 3.0)	....	(- 3.5)	....	....	....	+ 35.5	+ 38.7	+ 44.7	+ 46.4	+ 44.8
Cribb	67	2	- 51.4	- 0.3	- 39.8	- 1.3	- 33.2	....	- 10.4	+ 13.0	+ 10.7	+ 16.7	+ 17.2	+ 16.7
Chronometrical Therm.	....	..	+ 2135.8	+ 2093.6	+ 1909.5	+ 1735.0	+ 1640.7	+ 1501.8	+ 1260.3	+ 1031.2	+ 788.4	+ 766.1	+ 689.5	+ 573.8
Range of Thermometer in Chronometer Room ...	}	..	29° to 37°	28° to 50°	32° to 39°	28° to 45°	33° to 46°	38° to 45°	36° to 47°	44° to 53°	43° to 56°	47° to 57°	49° to 54°	48° to 57°
Range of Thermometer in open air, or in heated Iron Tray, for the Chronometers marked with an Asterisk.	}	..	11° to 40°	22° to 47°	25° to 43°	14° to 42°	26° to 38°	....	23° to 47°	....	....	....	....	....

* These Chronometers were exposed to the open air on the north side of the building, during the weeks in which their rates are inclosed in parentheses (); and were placed near to the stove in a temperature of about 100°, during the weeks in which their rates are inclosed in brackets [].

† In these weeks the room was heated by a stove.

The rate given by the first week's trial is in every case omitted.

IN THE ORDER OF TEMPERATURE, CHRONOMETRICAL THERMOMETER.													NAME OF M A K E R.	Number.
April 19—26	April 26— May 3	June 21—28	June 7—14	May 31— June 7	Feb. 15—22	Mar. 1—8	June 14—21	May 24—31	Mar. 29— April 5	June 28— July 5	Mar. 22—29	July 5—12		
+ 8.5	+ 9.4	+12.6	+ 9.6	+11.9	+ 5.0	+10.3	+11.3	+10.0	+ 7.5	+ 9.0	+ 8.6	+ 8.2	Poole	1155
+12.2	+12.9	+19.0	+14.3	+15.8	....	....	+17.0	+12.2	+ 9.3	+13.5	+14.0	+12.8	Parkinson and Frodsham	2955
+16.5	+15.8	+17.3	+17.6	+18.8	+12.9	+14.8	+16.2	+17.8	+16.5	+17.3	+16.7	+17.1	Shepherd	441
+ 3.7	+ 3.6	+ 4.6	+ 2.5	+ 6.2	- 4.4	- 4.9	+ 1.7	+ 2.1	- 2.5	+ 4.4	- 1.8	+ 4.4	E. J. Massey.....	125
- 3.0	- 5.4	- 4.9	- 5.1	- 6.2	-13.0	- 9.0	- 5.3	- 5.2	- 4.2	- 2.0	- 5.7	+ 0.4	Webb, Jun.	5536
+ 9.4	+ 8.8	+11.3	+ 4.5	+ 9.7	....	....	+ 9.9	+11.6	+13.1	+10.9	+15.0	+10.2	Parkinson and Frodsham	1886
+15.8	+15.8	+15.6	+14.2	+14.3	+ 1.1	+ 7.1	+12.5	+ 8.7	+ 6.6	+10.0	+ 4.2	+ 8.4	Reid and Sons	1160
- 1.0	- 3.5	+ 1.4	- 0.6	- 0.6	- 6.4	- 3.8	- 0.2	- 1.8	- 2.9	- 2.3	- 3.7	- 2.1	Birchall.	347
-14.6	-14.7	- 9.8	-14.5	-14.7	[+ 0.8]	[- 6.3]	-11.8	[- 3.8]	[- 9.5]	[- 2.6]	[- 3.8]	[- 3.3]	Loseby.....	101*
+ 1.6	+ 1.5	+ 3.1	+ 0.1	+ 1.1	- 5.6	- 5.3	- 0.2	- 6.0	-12.9	- 7.8	-11.4	-11.2	Dent	1797
+ 5.7	+ 5.5	+10.5	+ 8.5	+ 9.2	- 6.5	- 0.7	+ 8.5	+ 5.1	+ 3.4	+ 7.1	+ 2.0	+ 8.0	Reid and Sons	1056
-19.5	-21.2	-20.7	-16.9	-16.1	-17.1	-15.4	-22.3	-26.0	-16.4	-25.0	-12.4	-28.9	C. Frodsham.....	1482
- 7.2	- 7.3	- 8.6	- 9.4	- 9.8	-11.7	- 9.0	- 8.7	- 9.5	- 6.3	- 7.1	- 7.6	- 6.9	Connell	399
- 7.4	- 8.1	- 2.6	- 4.0	- 4.3	- 7.1	- 4.8	- 2.2	- 3.5	- 7.1	- 2.8	- 5.0	- 3.8	Parkinson and Frodsham	2630
+11.5	+11.6	+12.9	+10.4	+ 9.7	+ 3.7	- 2.1	+ 8.5	+ 0.9	- 5.5	+ 1.4	- 4.6	- 1.5	Muston	948
+ 6.8	+ 4.8	+ 8.2	+ 8.5	+11.1	+12.3	+10.9	+10.1	+13.0	+12.9	+11.5	+14.9	+13.4	Parkinson and Frodsham	2622
+23.8	+21.4	+18.9	+18.9	+19.1	+ 4.9	+ 9.6	+15.2	+ 5.6	+ 4.9	+ 7.0	+ 3.9	+ 4.6	Carter	345
+15.8	+13.9	+23.1	+14.8	+15.5	+ 0.6	+ 4.2	+18.0	+ 3.7	- 1.4	+10.7	- 1.1	+ 8.7	Appleton.....	484
+12.3	+12.3	+18.3	+15.2	+15.6	[+ 1.2]	[- 0.4]	+17.0	[+ 6.3]	[+ 6.9]	[+ 9.1]	[- 1.1]	[+10.6]	Birchall	348*
+ 0.8	+ 0.4	+ 7.2	+ 3.8	+ 3.7	-14.0	-10.9	+ 2.5	-10.0	-17.5	- 9.6	-17.2	- 9.4	Appleton.....	485
+ 4.6	+ 6.4	+10.8	+ 9.0	+10.5	- 1.9	+ 0.8	+ 8.2	- 0.9	- 1.2	+ 5.6	- 3.9	+ 4.6	Baker	1098
+ 2.7	+ 2.6	+ 5.7	+ 2.6	+ 3.2	- 0.1	- 0.7	+ 3.3	+ 0.5	- 7.5	- 0.7	- 3.6	- 2.1	Parkinson and Frodsham	2791
- 3.6	+ 0.9	+ 6.1	+ 4.7	+ 4.4	-12.4	- 7.3	+ 3.8	- 7.3	- 8.0	-14.6	- 4.6	-17.9	Dixon	159
+16.4	+15.3	+14.4	+10.4	+13.1	0.0	+ 0.4	+ 9.5	+ 1.5	+ 0.2	+ 2.5	+ 1.2	+ 2.5	Dent	1828
+ 1.2	+ 3.6	+13.6	+ 7.6	+ 7.3	-14.8	- 8.9	+10.1	+ 6.0	- 3.7	+ 8.4	- 6.5	+10.0	Norris and Campbell...	474
-14.3	- 6.5	+ 1.0	- 1.2	+ 0.1	-13.0	- 9.8	- 0.8	- 2.7	-13.8	- 2.7	- 9.8	- 2.9	C. Frodsham.....	1481
- 5.8	- 5.5	- 1.8	- 4.3	- 7.7	-15.0	-12.7	-10.1	-13.4	-29.1	-19.3	-24.9	-23.9	Fletcher.....	846
-11.7	-12.0	-11.5	-15.0	-14.9	-21.5	-23.5	-17.0	-27.5	-35.0	-27.0	-35.0	-31.7	Hewitt.....	1110
- 5.1	- 6.2	- 4.5	- 7.4	- 7.9	[-28.6]	[-29.4]	-10.6	[-10.7]	[-20.1]	[- 4.4]	[-18.1]	[- 4.7]	Loseby	104*
-13.2	-13.4	- 3.6	- 5.4	- 4.2	- 2.6	- 2.5	- 2.7	- 2.7	+ 5.1	- 1.8	+ 2.6	+ 0.3	Cotterell and Co.....	$\frac{0.39}{2.645}$
+22.3	+22.0	+27.4	+25.7	+25.9	+16.0	+19.4	+27.9	+27.3	+24.4	+30.6	+23.5	+32.3	Parkinson and Frodsham	2792
-70.2	-71.0	-68.1	-75.6	-76.5	....	[-39.4]	-71.4	[-86.0]	[-83.5]	[-96.0]	[-72.7]	[-98.0]	C. Frodsham.....	1516*
+44.2	+43.4	+53.3	+50.0	+46.9	....	[-10.9]	+49.5	[+19.1]	[+11.3]	[+25.6]	[- 4.2]	[+33.3]	C. Frodsham.....	1540*
+14.6	+13.9	+ 5.0	+ 6.3	+ 2.7	-16.9	- 3.7	+ 4.0	- 1.3	+ 3.0	- 1.8	+ 4.1	- 1.3	Cribb	67
+315.5	+265.9	-362.6	-369.5	-423.9	-546.9	-610.5	-796.0	-1288.0	-1461.9	-1520.0	-1545.7	-1727.6		
52° to 62°	54° to 60°	61° to 71°	55° to 76°	60° to 69°	60° to 83°	60° to 84°	63° to 78°	74° to 88°	74° to 90°	73° to 89°	75° to 90°	76° to 92°		
....	....	....	....	....	65° to 112°	65° to 112°	....	85° to 107°	85° to 110°	79° to 110°	85° to 118°	85° to 106°		

* These Chronometers were exposed to the open air on the north side of the building, during the weeks in which their rates are inclosed in parentheses (); and were placed near to the stove in a temperature of about 100°, during the weeks in which their rates are inclosed in brackets [].

† In these weeks the room was heated by a stove.

The rate given by the first week's trial is in every case omitted.

(III)—ABSTRACT OF THE PRINCIPAL							
NAME OF MAKER.	Number.	Whether Pocket, 1, 2, or 8 Days.	First Day of First Week of Rating.	Last Day of Last Week of Rating.	No. of Weeks.	Least Weekly Sum.	In what Week.
Poole.....	1155	2	January 25	July 12	24	+ 5.0	February 15 to 22 †
Parkinson and Frodsham	2955	P	March 22	July 12	16	+ 6.4	April 12 to 19
Shepherd	441	2	January 25	July 12	24	+ 6.4	February 1 to 8
E. J. Massey	125	2	January 18	July 12	25	- 4.9	March 1 to 8 †
Webb, Jun.	5536	2	January 25	July 12	24	- 13.0	February 15 to 22 †
Parkinson and Frodsham	1886	P	March 22	July 12	16	+ 1.3	May 17 to 24
Reid and Sons	1160	2	January 25	July 12	24	- 3.8	February 1 to 8
Birchall	347	1	January 18	July 12	25	- 16.8	January 18 to 25
Loseby	101*	2	February 1	July 12	23	(- 15.4)	March 15 to 22
Dent	1797	2	January 25	July 12	24	- 15.7	March 15 to 22
Reid and Sons	1056	2	January 25	July 12	24	- 9.6	March 15 to 22
C. Frodsham	1482	2	January 25	July 12	24	- 28.9	July 5 to 12 †
Connell	399	2	January 25	July 12	24	- 11.7	February 15 to 22 †
Parkinson and Frodsham	2630	2	January 18	July 12	25	- 20.4	{ February 1 to 8 February 22 to March 1 }
Muston	948	2	January 18	July 12	25	- 5.5	March 29 to April 5 †
Parkinson and Frodsham	2622	2	January 18	July 12	25	- 6.3	January 18 to 25
Carter	345	2	January 25	July 12	24	+ 3.9	March 22 to 29 †
Appleton	484	2	January 25	July 12	24	- 1.4	March 29 to April 5 †
Birchall	348*	2	January 18	July 12	25	- 14.0	January 18 to 25
Appleton	485	2	January 25	July 12	24	- 17.5	March 29 to April 5 †
Baker	1098	2	January 18	July 12	25	- 18.9	March 15 to 22
Parkinson and Frodsham	2791	2	January 18	July 12	25	- 20.8	March 15 to 22
Dixon	159	2	January 25	July 12	24	- 21.3	February 8 to 15
Dent	1828	2	January 25	July 12	24	0.0	February 15 to 22 †
Norris and Campbell	474	2	January 25	July 12	24	- 32.0	February 1 to 8
C. Frodsham	1481	2	January 25	July 12	24	- 32.9	February 8 to 15
Fletcher	846	2	January 25	July 12	24	- 29.1	March 29 to April 5 †
Hewitt	1110	2	January 18	July 12	25	- 45.9	March 15 to 22
Loseby	104*	2	February 1	July 12	23	[- 29.4]	March 1 to 8 †
Cotterell and Co.	$\frac{0.32}{26.25}$	2	January 18	July 12	25	- 13.4	April 26 to May 3
Parkinson and Frodsham	2792	2	January 18	July 12	25	- 14.8	February 8 to 15
C. Frodsham	1516*	2	March 1	July 12	19	[- 98.0]	July 5 to 12 †
C. Frodsham	1540*	2	March 1	July 12	19	[- 10.9]	March 1 to 8 †
Cribb	67	2	January 25	July 12	24	- 51.4	February 8 to 15

* These Chronometers were exposed to the open air on the north side of the building, during the weeks in which their rates are inclosed in parentheses (), and were placed near to the stove in a temperature of about 100°, during the weeks in which their rates are inclosed in brackets [].

† In these weeks the room was heated by a stove. N.B. The first week of rating of the Chronometers is not included in the Abstract.

The order of arrangement of the Chronometers in these Tables is determined solely by consideration of their irregularities of rate as expressed in the columns "Difference between Greatest and Least," and "Greatest Difference between one Week and the next," without any regard to the length of trial, or the circumstances of exposure during the trial.

CHANGES OF RATE.

Greatest Weekly Sum.	In what Week.	Difference between Greatest and Least.	Greatest Difference between one Week and the next.	Before and after what Day.	NAME OF MAKER.	Number.
+ 12.6	June 21 to 28	7.6	6.7	February 22	Poole	1155
+ 19.0	June 21 to 28	12.6	5.8	April 19	Parkinson and Frodsham	2955
+ 20.8	March 8 to 15	14.4	6.0	March 8	Shepherd	441
+ 7.5	May 3 to 10	12.4	8.9	April 5	E. J. Massey	125
+ 0.8	May 17 to 24	13.8	9.8	February 22	Webb, Jun.	5536
+ 15.0	March 22 to 29 †	13.7	10.3	May 24	Parkinson and Frodsham	1886
+ 15.8	{ April 19 to 26 April 26 to May 3 }	19.6	7.7	March 15	Reid and Sons	1160
+ 1.4	June 21 to 28	18.2	9.2	January 25	Birchall	347
[+ 0.8]	February 15 to 22 †	16.2	11.6	March 22	Loseby	101*
+ 3.1	June 21 to 28	18.8	10.9	June 28	Dent	1797
+ 10.5	June 21 to 28	20.1	11.6	March 22	Reid and Sons	1056
- 12.4	March 22 to 29 †	16.5	14.8	March 22	C. Frodsham	1482
+ 8.0	January 25 to February 1	19.7	14.6	February 15	Connell	399
- 2.2	June 14 to 21	18.2	15.6	March 1	Parkinson and Frodsham	2630
+ 14.4	May 17 to 24	19.9	15.5	April 5	Muston	948
+ 14.9	March 22 to 29 †	21.2	15.0	February 22	Parkinson and Frodsham	2622
+ 24.4	May 3 to 10	20.5	17.5	May 24	Carter	345
+ 18.0	June 14 to 21	19.4	18.8	April 5	Appleton	484
+ 18.3	June 21 to 28	32.3	12.6	January 25	Birchall	348*
+ 7.2	June 21 to 28	24.7	17.3	April 5	Appleton	485
+ 10.8	June 21 to 28	29.7	15.0	March 22	Baker	1098
+ 5.7	June 21 to 28	26.5	17.2	March 22	Parkinson and Frodsham	2791
+ 6.1	June 21 to 28	27.4	20.7	June 28	Dixon	159
+ 24.0	April 5 to 12	24.0	23.8	April 5	Dent	1828
+ 13.6	June 21 to 28	45.6	13.3	February 15	Norris and Campbell	474
+ 1.0	June 21 to 28	33.9	19.9	February 15	C. Frodsham	1481
+ 4.5	May 17 to 24	33.6	21.1	April 5	Fletcher	846
- 8.4	May 3 to 10	37.5	21.0	April 5	Hewitt	1110
(+ 5.5)	March 8 to 15	34.9	34.9	March 8	Loseby	104*
+ 31.4	March 15 to 22	44.8	31.6	February 15	Cotterell and Co.	$\frac{933}{2625}$
+ 32.3	July 5 to 12 †	47.1	30.8	February 15	Parkinson and Frodsham	2792
[- 39.4]	March 1 to 8 †	58.6	27.9	June 28	C. Frodsham	1516*
+ 53.3	June 21 to 28	64.2	27.8	May 31	C. Frodsham	1540*
+ 17.2	May 17 to 24	68.6	34.5	February 15	Cribb	67

* These Chronometers were exposed to the open air on the north side of the building, during the weeks in which their rates are inclosed in parentheses (), and were placed near to the stove in a temperature of about 100°, during the weeks in which their rates are inclosed in brackets []

† In these weeks the room was heated by a stove.

N.B. The first week of rating of the Chronometers is not included in the Abstract. The order of arrangement of the Chronometers in these Tables is determined solely by consideration of their irregularities of rate, as expressed in the columns "Difference between Greatest and Least," and "Greatest Difference between one Week and the next," without any regard to the length of trial, or the circumstances of exposure during the trial.

RATES OF CHRONOMETERS ON TRIAL FOR PURCHASE BY THE ADMIRALTY,

ABSTRACT FOR THE CHRONOMETERS EXPOSED TO MORE SEVERE TRIALS,

NAME OF MAKER.	Number.	Whether Pocket, 1, 2, or 8 Days.	First Day of First Week of Rating.	Last Day of Last Week of Rating.	No. of Weeks.	Least Weekly Sum.	In what Week.
Loseby	101	2	April 5	June 28	11	-14.7	April 26 to May 3
C. Frodsham	1516	2	April 5	June 28	11	-77.1	April 12 to 19
C. Frodsham	1540	2	April 5	June 28	11	+35.5	April 12 to 19
Loseby.....	104	2	April 5	June 28	11	-10.6	June 14 to 21
Birchall.....	348	2	January 18	June 28	12	-14.0	January 18 to 25

EXCLUDING THE WEEKS OF MORE SEVERE COLD OR HEAT.

Greatest Weekly Sum.	In what Week.	Difference between Greatest and Least.	Greatest Difference between one Week and the next.	Before and after what Day.	N A M E OF M A K E R.	Number.
- 9·8	June 21 to 28	4·9	3·7	May 3	Loseby	101
- 68·1	June 21 to 28	9·0	6·9	April 19	C. Frodsham	1516
+ 53·3	June 21 to 28	17·8	8·7	April 19	C. Frodsham	1540
+ 5·1	May 17 to 24	15·7	10·7	May 3	Loseby.	104
+ 18·3	June 21 to 28	32·3	12·4	April 12	Birchall	348