1868GOAMM..28G...1A

RATES OF CHRONOMETERS

ON TRIAL

FOR PURCHASE BY THE BOARD OF ADMIRALTY,

AT THE

ROYAL OBSERVATORY, GREENWICH.

1867.

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(I.) WEEKLY SUMS OF DAILY RATES IN THE ORDER OF TIME.

NAME OF MAKER.	No.	Whether 2 or 8 Days.	Construction of Escapement and Balance, from the Description furnished by the Maker.	Jan. 12—19 *	Jan. 19—26 *	Jan. 26 to Feb. 2 *	Feb. 2—9 *	Feb. 9—16	Feb. 16—23	Feb. 23 to Mar. 2	March 2—9 †	March 9—16 †	March 16—23 †	March 23—30 †
				s	s	s	s	s	s	s	s	s	s	s
Sewill	2263	2	Auxiliary compensation.	− 4·0	− 6·5	− 10·1	− 8·8	− 9·1	− 7·5	− 8·5	− 6·5	− 4·2	− 3·6	− 1·1
Gowland	2870	2	Auxiliary compensation.	− 8·4	− 7·0	− 6·8	− 5·5	− 7·9	− 6·1	− 4·3	− 7·6	− 7·8	− 9·8	− 8·7
F. Birchall	1035	2	Ordinary construction, with slight alteration.	− 10·6	− 5·8	− 8·0	− 8·2	− 8·4	− 7·6	− 7·7	− 9·7	− 7·6	− 7·1	− 6·8
Dent	3080	2	Dent's patent balance.	+ 19·0	+ 15·7	+ 9·9	+ 12·0	+ 9·5	+ 10·2	+ 10·7	+ 11·5	+ 14·0	+ 16·2	+ 17·8
Hennessy	3750	2	Poole's auxiliary.	+ 2·6	− 0·1	− 4·5	− 0·2	− 6·3	− 7·1	− 2·9	− 4·8	− 2·6	− 1·9	− 2·8
J. J. Muirhead	4006	2	Poole's auxiliary.	− 2·7	− 5·3	− 7·0	− 4·9	− 12·1	− 12·0	− 9·5	− 7·2	− 2·4	− 1·6	− 1·0
Lister and Sons	618	2	Poole's auxiliary.	+ 9·1	+ 3·8	− 1·5	+ 0·2	− 2·7	− 1·5	+ 1·1	+ 6·5	+ 8·4	+ 8·2	+ 7·8
Dent	2808	2	Dent's patent balance.	− 3·3	− 6·7	− 11·2	− 7·8	− 11·8	− 11·4	− 8·4	− 11·5	− 9·1	− 7·8	− 3·5
Poole	3970	2	Poole's auxiliary.	+ 1·5	− 0·5	− 1·0	+ 2·5	− 1·5	+ 0·5	+ 0·7	+ 6·1	+ 8·2	+ 9·1	+ 9·8
Reid and Sons	1255	2	Auxiliary compensation to the balance.	− 2·4	− 2·7	− 8·0	− 11·2	− 17·1	− 18·0	− 17·5	− 13·9	− 14·0	− 11·0	− 9·7
Bailey and Davison	1865	2	Auxiliary compensation.	− 6·4	− 4·3	− 4·3	− 3·6	− 10·5	− 7·0	− 4·2	− 5·2	− 4·0	− 4·3	− 4·2
Reid and Sons	1251	2	Auxiliary compensation to the balance.	− 0·2	− 3·1	− 7·5	− 5·0	− 9·0	− 9·5	− 7·3	− 3·2	+ 0·6	+ 3·7	+ 3·6
Kullberg	906	2	Kullberg's flat rim balance, without auxiliary.	+ 13·1	+ 8·1	− 0·2	+ 3·1	+ 0·5	+ 1·9	+ 4·1	+ 2·5	+ 4·9	+ 4·0	+ 6·1
Campbell	1000	2	Ordinary construction, with slight alteration.	− 16·5	− 13·5	− 6·5	− 6·5	− 6·6	− 6·0	− 6·9	− 5·6	0·0	+ 0·3	− 1·8
Glover	330	2	Auxiliary compensation for high and low temperatures.	+ 0·2	+ 0·5	0·0	− 0·5	+ 0·4	+ 1·5	− 0·4	+ 1·5	+ 1·3	+ 3·9	+ 6·3
Dobbie	3987	2	Auxiliary to balance.	− 3·9	− 0·2	+ 1·6	+ 0·6	+ 1·5	+ 3·4	+ 6·2	+ 3·2	+ 4·7	+ 4·7	+ 4·5
Hennessy	3745	2	Poole's auxiliary.	− 2·3	− 6·6	− 9·5	− 3·6	− 4·3	+ 0·8	+ 3·6	+ 6·0	+ 8·0	+ 7·6	+ 7·0
Campbell	1037	2	Ordinary construction, with slight alteration.	+ 4·0	+ 6·1	+ 10·4	+ 14·6	+ 12·4	+ 11·9	+ 11·6	+ 13·3	+ 16·1	+ 20·4	+ 19·7
Cairns	789	2	Auxiliary to balance.	+ 2·5	− 1·5	− 10·5	− 9·6	− 16·4	− 19·1	− 16·4	− 18·5	− 16·2	− 14·0	− 12·9
W. P. Birchall	46	2	Ordinary construction, with slight alteration.	− 4·8	− 3·5	+ 4·9	+ 6·5	+ 3·9	+ 4·2	+ 2·5	+ 5·4	+ 8·5	+ 13·4	+ 14·1
Russell and Son	9060	2	Kullberg's flat rim balance, without auxiliary.	+ 2·8	− 4·9	− 15·6	− 11·2	− 15·7	− 15·6	− 11·9	− 14·9	− 12·2	− 11·2	− 10·7
Glover	321	2	Auxiliary compensation for all temperatures.	+ 1·4	− 1·0	− 3·4	− 0·2	− 3·9	− 2·1	+ 0·3	+ 1·4	+ 3·7	+ 6·4	+ 9·6
Kullberg	1060	2	Kullberg's flat rim balance, without auxiliary.	− 3·5	− 8·0	− 12·7	− 10·4	− 11·4	− 12·5	− 10·5	− 6·5	− 3·6	− 6·4	− 1·8
Young	850	2	Auxiliary compensation.	− 6·6	− 5·6	− 6·0	− 6·1	− 10·0	− 9·6	− 8·3	− 10·0	− 3·9	− 0·5	+ 1·2
Roberts	$\frac{12}{1260}$	2	Kullberg's flat rim balance, without auxiliary.	− 7·8	− 9·6	− 10·5	− 7·6	− 9·9	− 8·0	− 7·0	− 6·7	− 4·8	+ 2·3	+ 9·7
Clark and Son	3866	2	Auxiliary to balance.	− 6·0	− 10·2	− 12·8	− 4·7	− 7·3	− 6·1	− 3·4	+ 7·0	+ 10·4	+ 10·9	+ 11·2
McGregor and Co.	4074	2	Auxiliary to balance.	+ 1·5	+ 8·0	+ 7·9	+ 8·1	+ 7·0	+ 7·1	+ 8·9	+ 14·0	+ 16·3	+ 16·4	+ 17·8
Webb	5444	2	Auxiliary acting in cold.	− 14·9	− 15·9	− 22·4	− 20·5	− 21·7	− 22·4	− 24·0	− 11·0	− 9·5	− 9·4	− 10·2
C. Frodsham	3345	2	Usual balance, with continuous auxiliary.	+ 2·1	+ 0·7	− 3·8	− 2·4	− 3·4	− 2·6	− 1·6	− 0·5	+ 1·9	+ 4·8	+ 7·6
Dent	2538	2	Dent's balance.	− 5·5	− 12·0	− 20·1	− 14·5	− 23·0	− 23·0	− 17·0	− 25·6	− 24·4	− 25·7	− 20·8
McMaster	1	2	Ordinary construction.	− 32·8	− 33·1	− 28·1	− 23·9	− 22·7	− 17·5	− 14·3	− 4·5	− 3·0	− 1·9	− 3·2
Sewill	2662	2	Improved balance.	− 1·5	− 5·6	− 6·5	− 6·4	− 8·2	− 7·0	− 7·4	− 16·1	− 16·5	− 12·7	− 6·8
C. Frodsham	3392	2	Usual balance, with supplementary compensation.	− 5·0	− 5·0	− 12·2	− 8·9	− 10·5	− 12·5	− 6·9	− 13·0	− 13·5	− 15·3	− 17·2
M. F. Dent	24924	2	Auxiliary acting in cold.	− 13·0	− 7·4	− 1·7	− 1·9	− 1·7	− 2·4	− 5·2	− 5·0	− 4·4	− 4·0	− 1·9
McGregor and Co.	3799	2	Auxiliary to balance.	− 5·0	− 1·7	+ 1·3	+ 4·0	+ 2·3	− 0·5	− 1·4	+ 6·5	+ 10·9	+ 13·9	+ 15·7
Langford	1737	2	Kullberg's flat rim balance, without auxiliary.	− 30·0	− 31·0	− 27·8	− 22·2	− 25·5	− 24·3	− 21·5	− 22·8	− 15·4	− 10·6	− 6·1
Cairns	800	2	Auxiliary to balance.	− 16·8	− 8·4	+ 1·4	− 2·0	− 3·5	− 2·4	− 4·4	− 1·4	+ 4·1	+ 1·6	0·0
Moore	4058	2	Auxiliary to balance.	− 19·1	− 9·1	− 3·3	− 14·5	− 2·2	+ 1·7	+ 4·7	+ 6·3	+ 9·0	+ 9·8	+ 7·7
Muirhead and Son	4005	2	Poole's auxiliary.	+ 7·0	+ 4·9	0·0	− 4·6	− 11·0	− 19·9	− 22·0	− 6·5	+ 1·5	+ 2·6	− 0·1
Dell and Co.	1587	2	Original auxiliary compensation.	+ 10·0	+ 15·5	+ 14·1	+ 13·9	+ 11·5	+ 18·0	+ 19·0	+ 19·0	+ 18·0	+ 17·3	+ 24·2
Isaac	430	2	Ordinary balance with slight addition, acting at all temperatures.	− 7·0	− 5·0	− 1·8	− 0·1	− 1·6	+ 1·2	+ 2·3	− 3·9	− 7·4	− 7·7	− 2·2
Parkinson and Bouts	1096	2	Ordinary construction.	− 12·5	− 6·5	+ 1·0	+ 1·9	+ 3·2	+ 4·7	+ 1·7	+ 11·0	+ 16·1	+ 14·7	+ 9·2
Hewitt and Son	2554	2	Hartnup's balance.	− 21·6	− 18·1	− 6·0	− 4·4	− 2·0	+ 2·1	+ 0·4	+ 11·1	+ 11·7	+ 11·9	+ 14·9
Hammersley	158	2	Flat rim balance: "tria in uno" balance spring.	+ 28·9	+ 30·6	+ 16·5	+ 19·0	+ 16·5	+ 18·0	+ 18·4	+ 19·5	+ 20·1	+ 21·7	+ 25·6
Brunton	567	2	Hartnup's balance.	− 12·2	− 7·5	+ 6·6	+ 5·9	+ 6·4	+ 8·6	+ 6·0	+ 10·9	+ 11·8	+ 16·1	+ 18·6
Lister and Sons	625	2	Poole's auxiliary.	− 18·1	− 15·5	− 14·6	− 15·1	− 17·8	− 16·1	− 17·4	+ 2·5	+ 5·5	+ 4·6	+ 3·4
Shepherd and Son	1723	2	Auxiliary to balance acting in cold.	+ 5·7	+ 5·1	+ 2·1	+ 6·9	+ 7·1	+ 10·0	+ 12·0	+ 11·5	+ 12·0	+ 12·8	+ 12·7
Poole	3921	2	Poole's auxiliary.	+ 2·4	+ 6·4	− 5·9	− 2·5	− 4·6	− 0·9	+ 1·0	+ 19·5	+ 29·9	+ 29·3	+ 28·4
Crisp	217	8	Auxiliary compensation.	+ 30·0	+ 38·0	+ 52·6	+ 53·4	+ 55·6	+ 58·8	+ 55·2	+ 62·4	+ 70·0	+ 73·8	+ 73·3
Johannsen	1271	2	Slight alteration in escapement: no auxiliary.	+ 10·7	+ 3·6	+ 8·5	+ 0·9	− 3·6	+ 0·6	+ 5·5	− 2·6	− 1·8	+ 4·8	+ 11·7
Webb	5458	2	Auxiliary acting in heat.	− 1·7	− 1·3	− 2·5	− 1·4	− 4·6	− 5·2	− 3·3	− 9·5	− 8·5	− 7·7	− 2·2
Birch	1615	2	Ordinary construction.	− 30·8	− 16·9	+ 3·9	+ 2·4	+ 9·1	+ 13·5	+ 2·5	+ 23·6	+ 30·5	+ 42·8	+ 32·4
Parkinson and Bouts	1087	2	Ordinary construction.	− 13·1	− 5·5	+ 1·8	+ 1·3	+ 2·3	+ 0·6	− 1·8	+ 9·8	+ 9·6	+ 12·3	+ 13·6
Penlington	1729	2	Auxiliary compensation balance.	− 7·0	− 9·0	− 14·1	− 13·9	− 16·6	− 14·5	− 10·2	− 12·9	− 12·3	− 12·2	− 9·9
Roskell	$\frac{1781}{08204}$	2	Kullberg's double rim balance.	+ 12·1	+ 4·4	− 7·0	− 3·7	− 7·9	− 7·6	− 6·9	− 7·1	− 6·9	− 6·2	− 2·0
				*	*	*	*				†	†	†	†
Chronometrical Thermometer			......	s + 2473·5	s + 1937·2	s + 984·3	s + 1256·0	s + 827·5	s + 679·5	s + 1058·0	s − 722·5	s − 877·0	s − 1260·2	s − 1515·3
Extremes of Temperature as shown by the Self-Registering Thermometers			......	° ° 30—44	° ° 32—54	° ° 50—56	° ° 46—56	° ° 51—58	° ° 53—60	° ° 46—58	° ° 51—74	° ° 58—76	° ° 59—84	° ° 63—89

Mar. 30 to April 6	April 6—13	April 13—20	April 20—27	April 27 to May 4	May 4—11	May 11—18	May 18—25	May 25 to June 1	June 1—8	June 8—15 †	June 15—22 †	June 22—29 †	June 29 to July 6 †	July 6—13	July 13—20	July 20—27	July 27 to Aug. 3	NAME OF MAKER.	No.
s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s		
− 4·5	− 4·7	− 5·4	− 4·0	− 3·7	− 2·6	− 2·8	− 5·4	− 3·5	− 3·2	− 3·2	− 3·7	− 7·0	− 5·4	− 3·0	− 2·0	− 3·5	− 2·5	Sewill	2263
− 8·6	− 7·5	− 7·0	− 8·0	− 8·2	− 6·8	− 5·0	− 5·5	− 4·0	− 4·5	− 5·4	− 3·8	− 6·3	− 3·0	− 0·5	+ 0·5	+ 0·8	+ 1·7	Gowland	2870
− 6·5	− 4·9	− 3·6	− 6·0	− 5·5	− 7·6	− 5·1	− 4·7	− 5·6	− 7·5	− 5·0	− 4·0	− 3·6	− 1·9	− 5·5	− 4·4	− 5·6	− 4·2	P. Birchall	1035
+ 18·0	+ 19·0	+ 20·0	+ 18·9	+ 18·4	+ 17·4	+ 19·6	+ 19·7	+ 19·0	+ 18·0	+ 17·1	+ 18·4	+ 17·5	+ 18·2	+ 16·5	+ 17·9	+ 17·9	+ 18·7	Dent	3080
− 2·1	− 0·3	− 2·5	− 2·5	− 2·5	− 1·3	+ 2·3	+ 2·8	− 0·8	− 1·5	− 3·2	− 4·8	− 8·0	− 3·0	+ 3·5	+ 3·6	+ 3·4	+ 3·0	Hennessy	3750
− 3·3	− 1·5	− 4·5	− 4·0	− 3·7	− 3·0	− 2·4	− 3·3	− 4·1	− 5·0	− 8·0	− 6·5	− 9·2	− 7·2	− 3·9	− 3·2	− 4·0	− 4·5	J. J. Muirhead	4006
+ 0·9	+ 1·6	+ 1·3	+ 0·9	+ 0·9	+ 6·0	+ 2·0	+ 1·5	+ 3·6	+ 4·0	+ 6·8	+ 6·6	+ 4·5	+ 6·5	+ 8·0	+ 6·0	+ 7·0	+ 3·5	Lister and Sons	618
− 3·8	− 1·0	− 0·4	− 1·1	− 2·5	− 5·3	− 0·2	− 1·2	− 3·1	− 2·8	− 5·9	− 3·6	− 4·6	− 1·8	+ 2·7	+ 3·8	+ 2·4	+ 3·6	Dent	2808
+ 5·1	+ 6·9	+ 7·5	+ 8·1	+ 8·8	+ 9·7	+ 9·3	+ 10·0	+ 10·7	+ 10·9	+ 10·4	+ 10·7	+ 7·5	+ 11·5	+ 14·2	+ 15·1	+ 13·7	+ 13·5	Poole	3970
− 13·9	− 10·6	− 13·4	− 14·0	− 13·6	− 11·4	− 12·5	− 12·0	− 10·6	− 12·8	− 10·1	− 10·0	− 11·4	− 7·6	− 11·5	− 14·1	− 15·1	− 15·1	Reid and Sons	1255
− 3·5	− 3·2	− 1·8	− 1·4	− 0·1	+ 1·8	+ 0·2	− 1·0	+ 2·4	+ 1·6	0·0	− 0·4	− 2·1	+ 0·5	+ 2·5	+ 2·5	+ 2·6	+ 3·2	Bailey and Davison	1865
− 3·4	− 5·2	− 6·8	− 5·5	− 5·1	− 0·9	− 1·9	− 0·8	− 1·8	− 0·4	− 0·5	+ 1·5	+ 0·4	+ 3·5	+ 6·2	+ 3·3	+ 2·1	+ 1·8	Reid and Sons	1251
+ 6·5	+ 8·0	+ 8·0	+ 7·5	+ 7·0	+ 6·0	+ 9·0	+ 10·0	+ 8·0	+ 6·0	+ 7·0	+ 10·1	+ 11·8	+ 11·1	+ 6·5	+ 5·1	+ 4·0	+ 5·0	Kullberg	906
− 4·9	− 3·0	− 1·8	− 0·3	− 0·9	− 3·5	− 10·1	− 10·4	− 7·2	− 4·2	− 3·6	− 5·5	− 6·9	− 4·1	− 6·0	− 5·9	− 7·6	− 6·0	Campbell	1000
+ 11·3	+ 11·4	+ 11·8	+ 12·5	+ 13·8	+ 14·2	+ 9·9	+ 9·6	+ 15·5	+ 15·0	+ 11·5	+ 8·8	+ 11·2	+ 13·5	+ 9·5	+ 16·7	+ 16·3	+ 16·0	Glover	330
+ 10·2	+ 13·1	+ 13·4	+ 13·5	+ 12·6	+ 9·9	+ 11·8	+ 11·0	+ 10·2	+ 10·4	+ 2·8	+ 2·5	+ 0·1	+ 5·7	+ 11·0	+ 14·6	+ 16·4	+ 15·5	Dobbie	3987
+ 1·9	+ 0·5	− 0·5	+ 1·5	+ 3·6	+ 10·4	+ 8·9	+ 9·1	+ 8·5	+ 10·8	+ 7·7	+ 5·5	+ 2·7	+ 7·8	+ 13·5	+ 10·6	+ 8·7	+ 8·7	Hennessy	3745
+ 12·5	+ 12·0	+ 13·5	+ 14·0	+ 17·6	+ 18·4	+ 18·5	+ 19·0	+ 19·5	+ 19·4	+ 22·1	+ 22·1	+ 21·3	+ 21·1	+ 11·5	+ 18·5	+ 18·0	+ 20·0	Campbell	1037
− 18·0	− 15·4	− 16·5	− 16·6	− 17·0	− 16·2	− 13·4	− 13·3	− 16·0	− 17·5	− 18·5	− 16·0	− 18·7	− 14·8	− 9·5	− 14·0	− 14·6	− 15·2	Cairns	789
+ 6·5	+ 11·1	+ 7·0	+ 14·0	+ 8·0	+ 8·2	+ 11·3	+ 13·9	+ 16·1	+ 18·4	+ 14·4	+ 15·4	+ 14·2	+ 15·1	+ 9·5	+ 9·1	+ 8·2	+ 15·7	W. P. Birchall	46
− 7·1	− 6·5	− 7·7	− 7·2	− 8·1	− 10·1	− 5·5	− 4·8	− 7·6	− 8·9	− 4·5	+ 0·5	+ 3·0	+ 4·0	− 2·5	− 4·6	− 7·4	− 5·0	Russell and Son	9060
+ 8·2	+ 9·5	+ 10·1	+ 9·4	+ 10·6	+ 12·4	+ 12·5	+ 14·0	+ 14·9	+ 13·6	+ 17·0	+ 17·4	+ 23·6	+ 26·0	+ 20·0	+ 21·5	+ 21·0	+ 21·7	Glover	321
− 5·5	− 3·2	− 4·6	− 3·9	− 5·4	− 7·1	− 13·0	− 17·1	− 17·7	− 17·1	− 6·7	− 4·4	− 1·5	− 3·5	− 7·0	− 5·5	+ 3·5	− 6·0	Kullberg	1060
− 0·8	+ 0·9	+ 0·3	+ 0·1	− 0·3	− 2·9	− 0·1	− 0·6	− 1·0	− 1·9	+ 5·0	+ 10·0	+ 9·5	+ 10·5	− 0·4	+ 0·9	+ 0·1	+ 2·4	Young	850
− 2·5	− 4·5	− 5·1	− 3·4	− 3·6	− 3·4	− 2·5	− 3·9	− 2·6	− 2·1	+ 0·1	+ 1·9	+ 0·9	+ 2·7	+ 6·0	0·0	− 1·5	− 0·1	Roberts	$\frac{12}{1260}$
+ 1·4	+ 0·1	− 2·0	− 0·5	+ 0·5	+ 6·2	+ 2·8	+ 1·5	+ 3·0	+ 3·0	+ 3·5	+ 4·0	+ 2·0	+ 5·5	+ 8·0	+ 7·5	+ 6·5	+ 4·0	Clark and Son	3866
+ 18·0	+ 20·0	+ 20·2	+ 21·3	+ 21·0	+ 24·0	+ 22·5	+ 21·5	+ 23·5	+ 24·0	+ 16·5	+ 17·4	+ 15·1	+ 19·7	+ 24·3	+ 30·5	+ 29·9	+ 32·0	McGregor and Co.	4074
− 19·0	− 17·5	− 17·2	− 16·4	− 12·9	− 6·4	− 15·8	− 19·4	− 15·5	− 15·4	− 15·9	− 19·5	− 27·2	− 27·3	− 18·0	− 17·7	− 16·8	− 18·7	Webb	5444
+ 2·6	+ 5·1	+ 7·9	+ 7·0	+ 5·7	+ 4·9	+ 5·9	+ 5·5	+ 7·6	+ 6·0	+ 15·0	+ 20·5	+ 23·0	+ 27·0	+ 20·0	+ 17·5	+ 17·7	+ 17·3	C. Frodsham	3345
− 7·5	− 6·0	− 8·9	− 8·6	− 10·5	− 19·2	− 5·3	− 5·0	− 14·5	− 16·0	− 26·2	− 20·8	− 21·7	− 18·8	− 7·0	− 5·0	− 9·5	− 5·1	Dent	2538
− 13·3	− 16·8	− 19·3	− 16·9	− 12·8	− 5·8	− 8·1	− 11·6	− 10·3	− 11·2	− 9·4	− 7·9	− 12·5	− 10·5	− 3·3	− 7·7	− 11·7	− 9·3	McMaster	1
+ 4·5	+ 5·1	+ 5·4	+ 4·9	+ 2·2	− 2·5	+ 1·7	+ 0·8	− 1·0	− 2·5	− 6·0	− 5·5	− 2·5	+ 0·5	+ 10·2	+ 10·8	+ 10·3	+ 12·7	Sewill	2662
− 7·7	− 7·3	− 6·8	− 6·7	− 8·0	− 8·4	− 5·6	− 4·7	− 5·8	− 7·3	− 17·2	− 19·6	− 23·4	− 18·5	− 4·0	− 1·9	− 0·1	− 3·0	C. Frodsham	3392
− 2·9	− 1·0	+ 1·5	+ 1·0	+ 0·8	+ 0·7	+ 0·5	0·0	+ 4·0	+ 4·6	+ 10·4	+ 10·4	+ 13·6	+ 16·5	+ 5·0	+ 3·6	+ 4·4	+ 4·7	M. F. Dent	24924
+ 3·0	+ 5·0	+ 4·7	+ 4·0	+ 4·7	+ 11·5	+ 7·6	+ 7·5	+ 9·5	+ 9·6	+ 11·8	+ 14·7	+ 12·8	+ 17·1	+ 21·7	+ 22·3	+ 21·5	+ 19·1	McGregor and Co.	3799
− 9·4	− 10·4	− 17·3	− 16·1	− 14·1	− 12·8	− 11·9	− 14·8	− 14·0	− 15·5	− 12·5	− 6·9	− 3·2	− 1·9	− 2·5	+ 1·9	+ 2·6	+ 8·6	Langford	1737
+ 0·2	+ 5·2	+ 4·3	+ 9·3	+ 9·0	+ 8·5	+ 9·0	+ 9·5	+ 9·5	+ 10·3	− 1·8	− 3·4	− 4·7	− 0·2	+ 9·6	+ 12·7	+ 13·1	+ 13·9	Cairns	800
+ 0·5	+ 6·8	+ 12·2	+ 14·6	+ 13·9	+ 12·0	+ 11·9	+ 12·1	+ 13·0	+ 12·0	+ 14·0	+ 13·0	+ 10·4	+ 12·6	+ 12·0	+ 13·5	+ 13·5	+ 14·9	Moore	4058
− 16·0	− 18·2	− 15·6	− 15·8	− 15·4	− 14·1	− 18·6	− 16·8	− 14·5	− 11·9	− 4·9	− 2·7	− 6·9	− 3·6	+ 2·0	− 6·5	− 5·5	− 9·0	Muirhead and Son	4005
+ 16·8	+ 17·7	+ 20·0	+ 24·0	+ 26·0	+ 32·7	+ 28·6	+ 28·3	+ 37·9	+ 39·1	+ 36·3	+ 39·2	+ 41·4	+ 46·0	+ 51·7	+ 47·8	+ 45·0	+ 44·5	Dell and Co.	1587
+ 12·4	+ 14·8	+ 14·7	+ 15·5	+ 15·5	+ 12·5	+ 17·5	+ 17·6	+ 16·4	+ 15·3	+ 7·7	+ 9·0	+ 10·3	+ 10·2	+ 16·0	+ 20·5	+ 21·5	+ 24·0	Isaac	430
+ 8·8	+ 10·6	+ 9·6	+ 11·0	+ 11·8	+ 13·2	+ 2·4	+ 0·6	+ 11·5	+ 11·8	+ 5·7	+ 0·7	− 14·7	− 12·0	− 3·0	+ 0·6	+ 0·4	− 2·0	Parkinson and Bouts	1096
+ 10·7	+ 11·7	+ 13·0	+ 13·6	+ 13·9	+ 13·0	+ 12·0	+ 10·8	+ 12·7	+ 12·9	+ 12·1	+ 12·7	+ 12·3	+ 13·5	+ 15·2	+ 17·3	+ 16·1	+ 16·9	Hewitt and Son	2554
+ 11·8	+ 10·9	+ 13·1	+ 12·9	+ 16·0	+ 25·1	+ 29·9	+ 25·0	+ 28·2	+ 36·6	+ 46·1	+ 43·7	+ 40·9	+ 44·4	+ 39·2	+ 35·7	+ 34·6	+ 42·0	Hammersley	158
+ 16·0	+ 17·0	+ 20·5	+ 20·1	+ 20·0	+ 19·5	+ 14·5	+ 14·3	+ 20·9	+ 21·3	+ 14·0	+ 15·1	+ 10·5	+ 14·4	+ 23·5	+ 26·5	+ 26·7	+ 27·1	Brunton	567
− 7·9	− 3·3	− 2·3	− 2·9	+ 1·3	+ 6·1	− 0·5	− 1·5	+ 2·6	+ 5·5	+ 0·9	− 1·8	− 4·6	+ 0·4	+ 10·5	+ 8·4	+ 11·5	+ 12·1	Lister and Sons	625
+ 19·5	+ 12·1	+ 10·8	+ 13·2	+ 15·5	+ 18·9	+ 23·0	+ 23·5	+ 22·0	+ 23·0	+ 19·6	+ 22·0	+ 21·2	+ 25·2	+ 40·5	+ 40·0	+ 39·0	+ 43·1	Shepherd and Son	1723
+ 14·4	+ 19·5	+ 20·7	+ 19·7	+ 20·6	+ 29·6	+ 15·2	+ 15·6	+ 19·6	+ 23·5	+ 25·0	+ 27·5	+ 24·5	+ 28·0	+ 29·5	+ 30·5	+ 28·5	+ 18·6	Poole	3921
+ 71·9	+ 69·4	+ 71·1	+ 71·1	+ 73·5	+ 73·4	+ 69·5	+ 69·6	+ 74·9	+ 77·5	+ 76·5	+ 74·5	+ 72·1	+ 72·1	+ 77·5	+ 75·9	+ 78·9	+ 75·7	Crisp	217
+ 26·4	+ 17·5	+ 20·5	+ 23·0	+ 14·0	+ 8·0	+ 20·0	+ 21·1	+ 15·4	+ 12·5	+ 6·5	+ 19·8	+ 17·7	+ 22·0	+ 39·7	+ 26·4	+ 18·0	+ 23·0	Johannsen	1271
− 4·1	− 3·5	− 3·1	− 3·6	− 3·5	− 8·3	− 3·7	− 1·7	− 2·8	− 8·4	+ 2·8	+ 21·1	+ 31·0	+ 19·4	− 10·6	− 8·6	− 9·2	− 7·8	Webb	5458
+ 15·5	+ 20·5	+ 22·0	+ 22·8	+ 29·8	+ 46·9	+ 32·0	+ 27·5	+ 37·0	+ 47·6	+ 63·9	+ 65·0	+ 66·0	+ 64·0	+ 61·0	+ 59·0	+ 60·4	+ 57·0	Birch	1615
+ 9·4	+ 12·4	+ 8·9	+ 9·3	+ 6·3	+ 6·7	− 4·9	− 7·2	− 6·1	− 12·4	− 21·0	− 15·0	− 16·4	− 12·0	+ 3·7	+ 14·4	+ 61·5	+ 45·5	Parkinson and Bouts	1087
− 6·5	− 3·9	− 3·0	− 2·4	− 0·6	− 5·0	− 0·2	+ 3·2	− 0·6	− 4·4	− 7·5	− 1·6	+ 0·1	+ 2·0	+ 0·5	...	...	...	Penlington	1729
− 6·4	− 8·8	− 8·4	− 7·8	− 7·7	− 8·7	+ 16·0	+ 44·0	+ 45·9	+ 42·6	..	..	...	...	...	...	...	...	Roskell	$\frac{1781}{08204}$
										†	†	†	†						
s + 661·0	s + 743·0	s + 588·5	s + 525·0	s + 418·0	s − 405·0	s + 740·0	s + 884·0	s + 132·5	s − 107·0	s − 1898·0	s − 2083·0	s − 2376·0	s − 2141·5	s − 397·0	s − 107·0	s − 205·0	s + 152·0	Chronometrical Thermometer.	
° ° 49—61	° ° 51—60	° ° 51—64	° ° 53—64	° ° 55—66	° ° 62—77	° ° 47—72	° ° 46—61	° ° 54—71	° ° 60—75	° ° 68—94	° ° 78—96	° ° 86—95	° ° 81—95	° ° 65—73	° ° 62—71	° ° 61—71	° ° 58—67	Extremes of Temperature as shown by the Self-Registering Thermometers.	

* During these weeks the North window of the Chronometer Room was left open.

† During these weeks the Chronometers were placed in the chamber of a stove heated by jets of gas. The gas flames are exterior to the chamber, into which none of the injurious products of combustion can enter.

The order of arrangement of the Chronometers in this Table is determined solely by consideration of their irregularities of rate.

The Chronometer Penlington 1729 was found stopped on July 16: it was removed by the maker on July 22, who found, on examination, that the main spring had broken. Roskell $\frac{1781}{08204}$ was found stopped on June 13: on removal by the maker on June 24 it was found that the oil at the upper staff pivot was dry. On account of the shorter duration of trial, the rates of these chronometers are not comparable with the rates of the other chronometers. They are in consequence placed in a separate division of the table above, and are omitted from the Abstract.

Two Chronometers which stopped during the first few weeks of trial are altogether omitted.

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(II.) WEEKLY SUMS OF DAILY RATES IN THE ORDER OF TEMPERATURE AS DETERMINED BY THE CHRONOMETRICAL THERMOMETER.

NAME OF MAKER.	No.	Whether 2 or 8 Days.	Construction of Escapement and Balance, from the Description furnished by the Maker.	Jan. 12—19 *	Jan. 19—26 *	Feb. 2—9 *	Feb. 23 to Mar. 2	Jan. 26 to Feb. 2 *	May 18—25	Feb. 9—16	April 6—13	May 11—18	Feb. 16—23	Mar. 30 to Apr. 6
				s	s	s	s	s	s	s	s	s	s	s
Sewill	2263	2	Auxiliary compensation.	− 4·0	− 6·5	− 8·8	− 8·5	− 10·1	− 5·4	− 9·1	− 4·7	− 2·8	− 7·5	− 4·5
Gowland	2870	2	Auxiliary compensation.	− 8·4	− 7·0	− 5·5	− 4·3	− 6·8	− 5·5	− 7·9	− 7·5	− 5·0	− 6·1	− 8·6
P. Birchall	1035	2	Ordinary construction, with slight alteration.	− 10·6	− 5·8	− 8·2	− 7·7	− 8·0	− 4·7	− 8·4	− 4·9	− 5·1	− 7·6	− 6·5
Dent	3080	2	Dent's patent balance.	+ 19·0	+ 15·7	+ 12·0	+ 10·7	+ 9·9	+ 19·7	+ 9·5	+ 19·0	+ 19·6	+ 10·2	+ 18·0
Hennessy	3750	2	Poole's auxiliary.	+ 2·6	− 0·1	− 0·2	− 2·9	− 4·5	+ 2·8	− 6·3	− 0·3	+ 2·3	− 7·1	− 2·1
J. J. Muirhead	4006	2	Poole's auxiliary.	− 2·7	− 5·3	− 4·9	− 9·5	− 7·0	− 3·3	− 12·1	− 1·5	− 2·4	− 12·0	− 3·3
Lister and Sons	618	2	Poole's auxiliary.	+ 9·1	+ 3·8	+ 0·2	+ 1·1	− 1·5	+ 1·5	− 2·7	+ 1·6	+ 2·0	− 1·5	+ 0·9
Dent	2808	2	Dent's patent balance.	− 3·3	− 6·7	− 7·8	− 8·4	− 11·2	− 1·2	− 11·8	− 1·0	− 0·2	− 11·4	− 3·8
Poole	3970	2	Poole's auxiliary.	+ 1·5	− 0·5	+ 2·5	+ 0·7	− 1·0	+ 10·0	− 1·5	+ 6·9	+ 9·3	+ 0·5	+ 5·1
Reid and Sons	1255	2	Auxiliary compensation to the balance.	− 2·4	− 2·7	− 11·2	− 17·5	− 8·0	− 12·0	− 17·1	− 10·6	− 12·5	− 18·0	− 13·9
Bailey and Davison	1865	2	Auxiliary compensation.	− 6·4	− 4·3	− 3·6	− 4·2	− 4·3	− 1·0	− 10·5	− 3·2	+ 0·2	− 7·0	− 3·5
Reid and Sons	1251	2	Auxiliary compensation to the balance.	− 0·2	− 3·1	− 5·0	− 7·3	− 7·5	− 0·8	− 9·0	− 5·2	− 1·9	− 9·5	− 3·4
Kullberg	906	2	Kullberg's flat rim balance, without auxiliary.	+ 13·1	+ 8·1	+ 3·1	+ 4·1	− 0·2	+ 10·0	+ 0·5	+ 8·0	+ 9·0	+ 1·9	+ 6·5
Campbell	1000	2	Ordinary construction, with slight alteration.	− 16·5	− 13·5	− 6·5	− 6·9	− 6·5	− 10·4	− 6·6	− 3·0	− 10·1	− 6·0	− 4·9
Glover	330	2	Auxiliary compensation for high and low temperatures.	+ 0·2	+ 0·5	− 0·5	− 0·4	0·0	+ 9·6	+ 0·4	+ 11·4	+ 9·9	+ 1·5	+ 11·3
Dobbie	3987	2	Auxiliary to balance.	− 3·9	− 0·2	+ 0·6	+ 6·2	+ 1·6	+ 11·0	+ 1·5	+ 13·1	+ 11·8	+ 3·4	+ 10·2
Hennessy	3745	2	Poole's auxiliary.	− 2·3	− 6·6	− 3·6	+ 3·6	− 9·5	+ 9·1	− 4·3	+ 0·5	+ 8·9	+ 0·8	+ 1·9
Campbell	1037	2	Ordinary construction, with slight alteration.	+ 4·0	+ 6·1	+ 14·6	+ 11·6	+ 10·4	+ 19·0	+ 12·4	+ 12·0	+ 18·5	+ 11·9	+ 12·5
Cairns	789	2	Auxiliary to balance.	+ 2·5	− 1·5	− 9·6	− 16·4	− 10·5	− 13·3	− 16·4	− 15·4	− 13·4	− 19·1	− 18·0
W. P. Birchall	46	2	Ordinary construction, with slight alteration.	− 4·8	− 3·5	+ 6·5	+ 2·5	+ 4·9	+ 13·9	+ 3·9	+ 11·1	+ 11·3	+ 4·2	+ 6·5
Russell and Son	9060	2	Kullberg's flat rim balance, without auxiliary.	+ 2·8	− 4·9	− 11·2	− 11·9	− 15·6	− 4·8	− 15·7	− 6·5	− 5·5	− 15·6	− 7·1
Glover	321	2	Auxiliary compensation for all temperatures.	+ 1·4	− 1·0	− 0·2	+ 0·3	− 3·4	+ 14·0	− 3·9	+ 9·5	+ 12·5	− 2·1	+ 8·2
Kullberg	1060	2	Kullberg's flat rim balance, without auxiliary.	− 3·5	− 8·0	− 10·4	− 10·5	− 12·7	− 17·1	− 11·4	− 3·2	− 13·0	− 12·5	− 5·5
Young	850	2	Auxiliary compensation.	− 6·6	− 5·6	− 6·1	− 8·3	− 6·0	− 0·6	− 10·0	+ 0·9	− 0·1	− 9·6	− 0·8
Roberts	12/1260	2	Kullberg's flat rim balance, without auxiliary.	− 7·8	− 9·6	− 7·6	− 7·0	− 10·5	− 3·9	− 9·9	− 4·5	− 2·5	− 8·0	− 2·5
Clark and Son	3866	2	Auxiliary to balance.	− 6·0	− 10·2	− 4·7	− 3·4	− 12·8	+ 1·5	− 7·3	+ 0·1	+ 2·8	− 6·1	+ 1·4
McGregor and Co.	4074	2	Auxiliary to balance.	+ 1·5	+ 8·0	+ 8·1	+ 8·9	+ 7·9	+ 21·5	+ 7·0	+ 20·0	+ 22·5	+ 7·1	+ 18·0
Webb	5444	2	Auxiliary acting in cold.	− 14·9	− 15·9	− 20·5	− 24·0	− 22·4	− 19·4	− 21·7	− 17·5	− 15·8	− 22·4	− 19·0
C. Frodsham	3345	2	Usual balance, with continuous auxiliary.	+ 2·1	+ 0·7	− 2·4	− 1·6	− 3·8	+ 5·5	− 3·4	+ 5·1	+ 5·9	− 2·6	+ 2·6
Dent	2538	2	Dent's balance.	− 5·5	− 12·0	− 14·5	− 17·0	− 20·1	− 5·0	− 23·0	− 6·0	− 5·3	− 23·0	− 7·5
McMaster	1	2	Ordinary construction.	− 32·8	− 33·1	− 23·9	− 14·3	− 28·1	− 11·6	− 22·7	− 16·8	− 8·1	− 17·5	− 13·3
Sewill	2662	2	Improved balance.	− 1·5	− 5·6	− 6·4	− 7·4	− 6·5	+ 0·8	− 8·2	+ 5·1	+ 1·7	− 7·0	+ 4·5
C. Frodsham	3392	2	Usual balance, with supplementary compensation.	− 5·0	− 5·0	− 8·9	− 6·9	− 12·2	− 4·7	− 10·5	− 7·3	− 5·6	− 12·5	− 7·7
M. F. Dent	24924	2	Auxiliary acting in cold.	− 13·0	− 7·4	− 1·9	− 5·2	− 1·7	0·0	− 1·7	− 1·0	+ 0·5	− 2·4	− 2·9
McGregor and Co.	3799	2	Auxiliary to balance.	− 5·0	− 1·7	+ 4·0	− 1·4	+ 1·3	+ 7·5	+ 2·3	+ 5·0	+ 7·6	− 0·5	+ 3·0
Langford	1737	2	Kullberg's flat rim balance, without auxiliary.	− 30·0	− 31·0	− 22·2	− 21·5	− 27·8	− 14·8	− 25·5	− 10·4	− 11·9	− 24·3	− 9·4
Cairns	800	2	Auxiliary to balance.	− 16·8	− 8·4	− 2·0	− 4·4	+ 1·4	+ 9·5	− 3·5	+ 5·2	+ 9·0	− 2·4	+ 0·2
Moore	4058	2	Auxiliary to balance.	− 19·1	− 9·1	− 14·5	+ 4·7	− 3·3	+ 12·1	− 2·2	+ 6·8	+ 11·9	+ 1·7	+ 0·5
Muirhead and Son	4005	2	Poole's auxiliary.	+ 7·0	+ 4·9	− 4·6	− 22·0	0·0	− 16·8	− 11·0	− 18·2	− 18·6	− 19·9	− 16·0
Dell and Co.	1587	2	Original auxiliary compensation.	+ 10·0	+ 15·5	+ 13·9	+ 19·0	+ 14·1	+ 28·3	+ 11·5	+ 17·7	+ 28·6	+ 18·0	+ 16·8
Isaac	430	2	Ordinary balance with slight addition, acting at all temperatures.	− 7·0	− 5·0	− 0·1	+ 2·3	− 1·8	+ 17·6	− 1·6	+ 14·8	+ 17·5	+ 1·2	+ 12·4
Parkinson and Bouts	1096	2	Ordinary construction.	− 12·5	− 6·5	+ 1·9	+ 1·7	+ 1·0	+ 0·6	+ 3·2	+ 10·6	+ 2·4	+ 4·7	+ 8·8
Hewitt and Son	2554	2	Hartnup's balance.	− 21·6	− 18·1	− 4·4	+ 0·4	− 6·0	+ 10·8	− 2·0	+ 11·7	+ 12·0	+ 2·1	+ 10·7
Hammersley	158	2	Flat rim balance : "tria in uno" balance spring.	+ 28·9	+ 30·6	+ 19·0	+ 18·4	+ 16·5	+ 25·0	+ 16·5	+ 10·9	+ 29·9	+ 18·0	+ 11·8
Brunton	567	2	Hartnup's balance.	− 12·2	− 7·5	+ 5·9	+ 6·0	+ 6·6	+ 14·3	+ 6·4	+ 17·0	+ 14·5	+ 8·6	+ 16·0
Lister and Sons	625	2	Poole's auxiliary.	− 18·1	− 15·5	− 15·1	− 17·4	− 14·6	− 1·5	− 17·8	− 3·3	− 0·5	− 16·1	− 7·9
Shepherd and Son	1723	2	Auxiliary to balance acting in cold.	+ 5·7	+ 5·1	+ 6·9	+ 12·0	+ 2·1	+ 23·5	+ 7·1	+ 12·1	+ 23·0	+ 10·0	+ 19·5
Poole	3921	2	Poole's auxiliary.	+ 2·4	+ 6·4	− 2·5	+ 1·0	− 5·9	+ 15·6	− 4·6	+ 19·5	+ 15·2	− 0·9	+ 14·4
Crisp	217	8	Auxiliary compensation.	+ 30·0	+ 38·0	+ 53·4	+ 55·2	+ 52·6	+ 69·6	+ 55·6	+ 69·4	+ 69·5	+ 58·8	+ 71·9
Johannsen	1271	2	Slight alteration in escapement : no auxiliary.	+ 10·7	+ 3·6	+ 0·9	+ 5·5	+ 8·5	+ 21·1	− 3·6	+ 17·5	+ 20·0	+ 0·6	+ 26·4
Webb	5458	2	Auxiliary acting in heat.	− 1·7	− 1·3	− 1·4	− 3·3	− 2·5	− 1·7	− 4·6	− 3·5	− 3·7	− 5·2	− 4·1
Birch	1615	2	Ordinary construction.	− 30·8	− 16·9	+ 2·4	+ 2·5	+ 3·9	+ 27·5	+ 9·1	+ 20·5	+ 32·0	+ 13·5	+ 15·5
Parkinson and Bouts	1087	2	Ordinary construction.	− 13·1	− 5·5	+ 1·3	− 1·8	+ 1·8	− 7·2	+ 2·3	+ 12·4	− 4·9	+ 0·6	+ 9·4
Penlington	1729	2	Auxiliary compensation balance.	− 7·0	− 9·0	− 13·9	− 10·2	− 14·1	+ 3·2	− 16·6	− 3·9	− 0·2	− 14·5	− 6·5
Roskell	1781/68204	2	Kullberg's double rim balance.	+ 12·1	+ 4·4	− 3·7	− 6·9	− 7·0	+ 44·0	− 7·9	− 8·8	+ 16·0	− 7·6	− 6·4
				*	*	*		*						
Chronometrical Thermometer			......	+ 2473·5	+ 1937·2	+ 1256·0	+ 1058·0	+ 984·3	+ 884·0	+ 827·5	+ 743·0	+ 740·0	+ 679·5	+ 661·0
Extremes of Temperature as shown by the Self-Registering Thermometers			......	30°—44°	32°—54°	46°—56°	46°—58°	50°—56°	46°—61°	51°—58°	51°—60°	47°—72°	53°—60°	49°—61°

NAME OF MAKER.	No.	April 13—20	April 20—27	Apr. 27 to May 4	July 27 to Aug. 3	May 25 to June 1	June 1—8	July 13—20	July 20—27	July 6—13	May 4—11	March 2—9 †	March 9—16 †	March 16—23 †	March 23—30 †	June 8—15 †	June 15—22 †	June 29 to July 6 †	June 22—29 †
		s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s	s
Sewill	2263	− 5·4	− 4·0	− 3·7	− 2·5	− 3·5	− 3·2	− 2·0	− 3·5	− 3·0	− 2·6	− 6·5	− 4·2	− 3·6	− 1·1	− 3·2	− 3·7	− 5·4	− 7·0
Gowland	2870	− 7·0	− 8·0	− 8·2	+ 1·7	− 4·0	− 4·5	+ 0·5	+ 0·8	− 0·5	− 6·8	− 7·6	− 7·8	− 9·8	− 8·7	− 5·4	− 3·8	− 3·0	− 6·3
P. Birchall	1035	− 3·6	− 6·0	− 5·5	− 4·2	− 5·6	− 7·5	− 4·4	− 5·6	− 5·5	− 7·6	− 9·7	− 7·6	− 7·1	− 6·8	− 5·0	− 4·0	− 1·9	− 3·6
Dent	3080	+ 20·0	+ 18·9	+ 18·4	+ 18·7	+ 19·0	+ 18·0	+ 17·9	+ 17·9	+ 16·5	+ 17·4	+ 11·5	+ 14·0	+ 16·2	+ 17·8	+ 17·1	+ 18·4	+ 18·2	+ 17·5
Hennessy	3750	− 2·5	− 2·5	− 2·5	+ 3·0	− 0·8	− 1·5	+ 3·6	+ 3·4	+ 3·5	− 1·3	− 4·8	− 2·6	− 1·9	− 2·8	− 3·2	− 4·8	− 3·0	− 8·0
J. J. Muirhead	4006	− 4·5	− 4·0	− 3·7	− 4·5	− 4·1	− 5·0	− 3·2	− 4·0	− 3·9	− 3·0	− 7·2	− 2·4	− 1·6	− 1·0	− 8·0	− 6·5	− 7·2	− 9·2
Lister and Sons	618	+ 1·3	+ 0·9	+ 0·9	+ 3·5	+ 3·6	+ 4·0	+ 6·0	+ 7·0	+ 8·0	+ 6·0	+ 6·5	+ 8·4	+ 8·2	+ 7·8	+ 6·8	+ 6·6	+ 6·5	+ 4·5
Dent	2808	− 0·4	− 1·1	− 2·5	+ 3·6	− 3·1	− 2·8	+ 3·8	+ 2·4	+ 2·7	− 5·3	− 11·5	− 9·1	− 7·8	− 3·5	− 5·9	− 3·6	− 1·8	− 4·6
Poole	3970	+ 7·5	+ 8·1	+ 8·8	+ 13·5	+ 10·7	+ 10·9	+ 15·1	+ 13·7	+ 14·2	+ 9·7	+ 6·1	+ 8·2	+ 9·1	+ 9·8	+ 10·4	+ 10·7	+ 11·5	+ 7·5
Reid and Sons	1255	− 13·4	− 14·0	− 13·6	− 15·1	− 10·6	− 12·8	− 14·1	− 15·1	− 11·5	− 11·4	− 13·9	− 14·0	− 11·0	− 9·7	− 10·1	− 10·0	− 7·6	− 11·4
Bailey and Davison	1865	− 1·8	− 1·4	− 0·1	+ 3·2	+ 2·4	+ 1·6	+ 2·5	+ 2·6	+ 2·5	+ 1·8	− 5·2	− 4·0	− 4·3	− 4·2	0·0	− 0·4	+ 0·5	− 2·1
Reid and Sons	1251	− 6·8	− 5·5	− 5·1	+ 1·8	− 1·8	− 0·4	+ 3·3	+ 2·1	+ 6·2	− 0·9	− 3·2	+ 0·6	+ 3·7	+ 3·6	− 0·5	+ 1·5	+ 3·5	+ 0·4
Kullberg	906	+ 8·0	+ 7·5	+ 7·0	+ 5·0	+ 8·0	+ 6·0	+ 5·1	+ 4·0	+ 6·5	+ 6·0	+ 2·5	+ 4·9	+ 4·0	+ 6·1	+ 7·0	+ 10·1	+ 11·1	+ 11·8
Campbell	1000	− 1·8	− 0·3	− 0·9	− 6·0	− 7·2	− 4·2	− 5·9	− 7·6	− 6·0	− 3·5	− 5·6	0·0	+ 0·3	− 1·8	− 3·6	− 5·5	− 4·1	− 6·9
Glover	330	+ 11·8	+ 12·5	+ 13·8	+ 16·0	+ 15·5	+ 15·0	+ 16·7	+ 16·3	+ 9·5	+ 14·2	+ 1·5	+ 1·3	+ 3·9	+ 6·3	+ 11·5	+ 8·8	+ 13·5	+ 11·2
Dobbie	3987	+ 13·4	+ 13·5	+ 12·6	+ 15·5	+ 10·2	+ 10·4	+ 14·6	+ 16·4	+ 11·0	+ 9·9	+ 3·2	+ 4·7	+ 4·7	+ 4·5	+ 2·8	+ 2·5	+ 5·7	+ 0·1
Hennessy	3745	− 0·5	+ 1·5	+ 3·6	+ 8·7	+ 8·5	+ 10·8	+ 10·6	+ 8·7	+ 13·5	+ 10·4	+ 6·0	+ 8·0	+ 7·6	+ 7·0	+ 7·7	+ 5·5	+ 7·8	+ 2·7
Campbell	1037	+ 13·5	+ 14·0	+ 17·6	+ 20·0	+ 19·5	+ 19·4	+ 18·5	+ 18·0	+ 11·5	+ 18·4	+ 13·3	+ 16·1	+ 20·4	+ 19·7	+ 22·1	+ 22·1	+ 21·1	+ 21·3
Cairns	789	− 16·5	− 16·6	− 17·0	− 15·2	− 16·0	− 17·5	− 14·0	− 14·6	− 9·5	− 16·2	− 18·5	− 16·2	− 14·0	− 12·9	− 18·5	− 16·0	− 14·8	− 18·7
W. P. Birchall	46	+ 7·0	+ 14·0	+ 8·0	+ 15·7	+ 16·1	+ 18·4	+ 9·1	+ 8·2	+ 9·5	+ 8·2	+ 5·4	+ 8·5	+ 13·4	+ 14·1	+ 14·4	+ 15·4	+ 15·1	+ 14·2
Russell and Son	9060	− 7·7	− 7·2	− 8·1	− 5·0	− 7·6	− 8·9	− 4·6	− 7·4	− 2·5	− 10·1	− 14·9	− 12·2	− 11·2	− 10·7	− 4·5	+ 0·5	+ 4·0	+ 3·0
Glover	321	+ 10·1	+ 9·4	+ 10·6	+ 21·7	+ 14·9	+ 13·6	+ 21·5	+ 21·0	+ 20·0	+ 12·4	+ 1·4	+ 3·7	+ 6·4	+ 9·6	+ 17·0	+ 17·4	+ 26·0	+ 23·6
Kullberg	1060	− 4·6	− 3·9	− 5·4	− 6·0	− 17·7	− 17·1	− 5·5	+ 3·5	− 7·0	− 7·1	− 6·5	− 3·6	− 6·4	− 1·8	− 6·7	− 4·4	− 3·5	− 1·5
Young	850	+ 0·3	+ 0·1	− 0·3	+ 2·4	− 1·0	− 1·9	+ 0·9	+ 0·1	− 0·4	− 2·9	− 10·0	− 3·9	− 0·5	+ 1·2	+ 5·0	+ 10·0	+ 10·5	+ 9·5
Roberts	12/1260	− 5·1	− 3·4	− 3·6	− 0·1	− 2·6	− 2·1	0·0	− 1·5	+ 6·0	− 3·4	− 6·7	− 4·8	+ 2·3	+ 9·7	+ 0·1	+ 1·9	+ 2·7	+ 0·9
Clark and Son	3866	− 2·0	− 0·5	+ 0·5	+ 4·0	+ 3·0	+ 3·0	+ 7·5	+ 6·5	+ 8·0	+ 6·2	+ 7·0	+ 10·4	+ 10·9	+ 11·2	+ 3·5	+ 4·0	+ 5·5	+ 2·0
McGregor and Co.	4074	+ 20·2	+ 21·3	+ 21·0	+ 32·0	+ 23·5	+ 24·0	+ 30·5	+ 29·9	+ 24·3	+ 24·0	+ 14·0	+ 16·3	+ 16·4	+ 17·8	+ 16·5	+ 17·4	+ 19·7	+ 15·1
Webb	5444	− 17·2	− 16·4	− 12·9	− 18·7	− 15·5	− 15·4	− 17·7	− 16·8	− 18·0	− 6·4	− 11·0	− 9·5	− 9·4	− 10·2	− 15·9	− 19·5	− 27·3	− 27·2
C. Frodsham	3345	+ 7·9	+ 7·0	+ 5·7	+ 17·3	+ 7·6	+ 6·0	+ 17·5	+ 17·7	+ 20·0	+ 4·9	− 0·5	+ 1·9	+ 4·8	+ 7·6	+ 15·0	+ 20·5	+ 27·0	+ 23·0
Dent	2538	− 8·9	− 8·6	− 10·5	− 5·1	− 14·5	− 16·0	− 5·0	− 9·5	− 7·0	− 19·2	− 25·6	− 24·4	− 25·7	− 20·8	− 26·2	− 20·8	− 18·8	− 21·7
McMaster	1	− 19·3	− 16·9	− 12·8	− 9·3	− 10·3	− 11·2	− 7·7	− 11·7	− 3·3	− 5·8	− 4·5	− 3·0	− 1·9	− 3·2	− 9·4	− 7·9	− 10·5	− 12·5
Sewill	2662	+ 5·4	+ 4·9	+ 2·2	+ 12·7	− 1·0	− 2·5	+ 10·8	+ 10·3	+ 10·2	− 2·5	− 16·1	− 16·5	− 12·7	− 6·8	− 6·0	− 5·5	+ 0·5	− 2·5
C. Frodsham	3392	− 6·8	− 6·7	− 8·0	− 3·0	− 5·8	− 7·3	− 1·9	− 0·1	− 4·0	− 8·4	− 13·0	− 13·5	− 15·3	− 17·2	− 17·2	− 19·6	− 18·5	− 23·4
M. F. Dent	24924	+ 1·5	+ 1·0	+ 0·8	+ 4·7	+ 4·0	+ 4·6	+ 3·6	+ 4·4	+ 5·0	+ 0·7	− 5·0	− 4·4	− 4·0	− 1·9	+ 10·4	+ 10·4	+ 16·5	+ 13·6
McGregor and Co.	3799	+ 4·7	+ 4·0	+ 4·7	+ 19·1	+ 9·5	+ 9·6	+ 22·3	+ 21·5	+ 21·7	+ 11·5	+ 6·5	+ 10·9	+ 13·9	+ 15·7	+ 11·8	+ 14·7	+ 17·1	+ 12·8
Langford	1737	− 17·3	− 16·1	− 14·1	+ 8·6	− 14·0	− 15·5	+ 1·9	+ 2·6	− 2·5	− 12·8	− 22·8	− 15·4	− 10·6	− 6·1	− 12·5	− 6·9	− 1·9	− 3·2
Cairns	800	+ 4·3	+ 9·3	+ 9·0	+ 13·9	+ 9·5	+ 10·3	+ 12·7	+ 13·1	+ 9·6	+ 8·5	− 1·4	+ 4·1	+ 1·6	0·0	− 1·8	− 3·4	− 0·2	− 4·7
Moore	4058	+ 12·2	+ 14·6	+ 13·9	+ 14·9	+ 13·0	+ 12·0	+ 13·5	+ 13·5	+ 12·0	+ 12·0	+ 6·3	+ 9·0	+ 9·8	+ 7·7	+ 14·0	+ 13·0	+ 12·6	+ 10·4
Muirhead and Son	4005	− 15·6	− 15·8	− 15·4	− 9·0	− 14·5	− 11·9	− 6·5	− 5·5	+ 2·0	− 14·1	− 6·5	+ 1·5	+ 2·6	− 0·1	− 4·9	− 2·7	− 3·6	− 6·9
Dell and Co.	1587	+ 20·0	+ 24·0	+ 26·0	+ 44·5	+ 37·9	+ 39·1	+ 47·8	+ 45·0	+ 51·7	+ 32·7	+ 19·0	+ 18·0	+ 17·3	+ 24·2	+ 36·3	+ 39·2	+ 46·0	+ 41·4
Isaac	430	+ 14·7	+ 15·5	+ 15·5	+ 24·0	+ 16·4	+ 15·3	+ 20·5	+ 21·5	+ 16·0	+ 12·5	− 3·9	− 7·4	− 7·7	− 2·2	+ 7·7	+ 9·0	+ 10·2	+ 10·3
Parkinson and Bouts	1096	+ 9·6	+ 11·0	+ 11·8	− 2·0	+ 11·5	+ 11·8	+ 0·6	+ 0·4	− 3·0	+ 13·2	+ 11·0	+ 16·1	+ 14·7	+ 9·2	+ 5·7	+ 0·7	− 12·0	− 14·7
Hewitt and Son	2554	+ 13·0	+ 13·6	+ 13·9	+ 16·9	+ 12·7	+ 12·9	+ 17·3	+ 16·1	+ 15·2	+ 13·0	+ 11·1	+ 11·7	+ 11·9	+ 14·9	+ 12·1	+ 12·7	+ 13·5	+ 12·3
Hammersley	158	+ 13·1	+ 12·9	+ 16·0	+ 42·0	+ 28·2	+ 36·6	+ 35·7	+ 34·6	+ 39·2	+ 25·1	+ 19·5	+ 20·1	+ 21·7	+ 25·6	+ 46·1	+ 43·7	+ 44·4	+ 40·9
Brunton	567	+ 20·5	+ 20·1	+ 20·0	+ 27·1	+ 20·9	+ 21·3	+ 26·5	+ 26·7	+ 23·5	+ 19·5	+ 10·9	+ 11·8	+ 16·1	+ 18·6	+ 14·0	+ 15·1	+ 14·4	+ 10·5
Lister and Sons	625	− 2·3	− 2·9	+ 1·3	+ 12·1	+ 2·6	+ 5·5	+ 8·4	+ 11·5	+ 10·5	+ 6·1	+ 2·5	+ 5·5	+ 4·6	+ 3·4	+ 0·9	− 1·8	+ 0·4	− 4·6
Shepherd and Son	1723	+ 10·8	+ 13·2	+ 15·5	+ 43·1	+ 22·0	+ 23·0	+ 40·0	+ 39·0	+ 40·5	+ 18·9	+ 11·5	+ 12·0	+ 12·8	+ 12·7	+ 19·6	+ 22·0	+ 25·2	+ 21·2
Poole	3921	+ 20·7	+ 19·7	+ 20·6	+ 18·6	+ 19·6	+ 23·5	+ 30·5	+ 28·5	+ 29·5	+ 29·6	+ 19·5	+ 29·9	+ 29·3	+ 28·4	+ 25·0	+ 27·5	+ 28·0	+ 24·5
Crisp	217	+ 71·1	+ 71·1	+ 73·5	+ 75·7	+ 74·9	+ 77·5	+ 75·9	+ 78·9	+ 77·5	+ 73·4	+ 62·4	+ 70·0	+ 73·8	+ 73·3	+ 76·5	+ 74·5	+ 72·1	+ 72·1
Johannsen	1271	+ 20·5	+ 23·0	+ 14·0	+ 23·0	+ 15·4	+ 12·5	+ 26·4	+ 18·0	+ 39·7	+ 8·0	− 2·6	− 1·8	+ 4·8	+ 11·7	+ 6·5	+ 19·8	+ 22·0	+ 17·7
Webb	5458	− 3·1	− 3·6	− 3·5	− 7·8	− 2·8	− 8·4	− 8·6	− 9·2	− 10·6	− 8·3	− 9·5	− 8·5	− 7·7	− 2·2	+ 2·8	+ 21·1	+ 19·4	+ 31·0
Birch	1615	+ 22·0	+ 22·8	+ 29·8	+ 57·0	+ 37·0	+ 47·6	+ 59·0	+ 60·4	+ 61·0	+ 46·9	+ 23·6	+ 30·5	+ 42·8	+ 32·4	+ 63·9	+ 65·0	+ 64·0	+ 66·0
Parkinson and Bouts	1087	+ 8·9	+ 9·3	+ 6·3	+ 45·5	− 6·1	− 12·4	+ 14·4	+ 61·5	+ 3·7	+ 6·7	+ 9·8	+ 9·6	+ 12·3	+ 13·6	− 21·0	− 15·0	− 12·0	− 16·4
Penlington	1729	− 3·0	− 2·4	− 0·6	..	− 0·6	− 4·4	...	...	+ 0·5	− 5·0	− 12·9	− 12·3	− 12·2	− 9·9	− 7·5	− 1·6	+ 2·0	+ 0·1
Roskell	1781/68204	− 8·4	− 7·8	− 7·7	..	+ 45·9	+ 42·6	...	...	...	− 8·7	− 7·1	− 6·9	− 6·2	− 2·0	...	...	...	...
												†	†	†	†	†	†	†	†
Chronometrical Thermometer.		+ 588·5	+ 525·0	+ 418·0	+ 152·0	+ 132·5	− 107·0	− 107·0	− 205·0	− 397·0	− 405·0	− 722·5	− 877·0	− 1260·2	− 1515·3	− 1898·0	− 2083·0	− 2141·5	− 2376·0
Extremes of Temperature as shown by the Self-Registering Thermometers.		51°—64°	53°—64°	55°—66°	58°—67°	54°—71°	60°—75°	62°—71°	61°—71°	65°—73°	62°—77°	51°—74°	58°—76°	59°—84°	63°—89°	68°—94°	78°—96°	81°—95°	86°—95°

* During these weeks the North window of the Chronometer Room was left open.

† During these weeks the Chronometers were placed in the chamber of a stove heated by jets of gas. The gas flames are exterior to the chamber, into which none of the injurious products of combustion can enter.

The order of arrangement of the Chronometers in this Table is determined solely by consideration of their irregularities of rate.

The Chronometer Penlington 1729 was found stopped on July 16 : it was removed by the maker on July 22, who found, on examination, that the main spring had broken. Roskell 1781/68204 was found stopped on June 13 : on removal by the maker on June 24 it was found that the oil at the upper staff pivot was dry. On account of the shorter duration of trial the rates of these chronometers are not comparable with the rates of the other chronometers. They are in consequense placed in a separate division of the table above, and are omitted from the Abstract.

Two Chronometers which stopped during the first few weeks of trial are altogether omitted.

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(III.)—ABSTRACT OF THE PRINCIPAL CHANGES OF RATE.

NAME OF MAKER.	No.	Whether 2 or 8 Days.	ADDRESS OF MAKER.	Construction of Escapement and Balance, from the Description furnished by the Maker.	First Day of First Week of Rating.	Last Day of Last Week of Rating.	Number of Weeks.	Least Weekly Sum.
Sewill	2263	2	61, South Castle Street, Liverpool.	Auxiliary compensation.	January 12	August 3	29	−10·1
Gowland	2870	2	178, High Street West, Sunderland.	Auxiliary compensation.	January 12	August 3	29	− 9·8
P. Birchall	1035	2	12a, Stonefield Street, Islington, London.	Ordinary construction, with slight alteration.	January 12	August 3	29	−10·6
Dent	3080	2	61, Strand, London.	Dent's patent balance.	January 12	August 3	29	+ 9·5
Hennessy	3750	2	5, Wind Street, Swansea.	Poole's auxiliary.	January 12	August 3	29	− 8·0
J. J. Muirhead	4006	2	84, Buchanan Street, Glasgow.	Poole's auxiliary.	January 12	August 3	29	−12·1
Lister and Sons	618	2	Mosley Street, Newcastle-on-Tyne.	Poole's auxiliary.	January 12	August 3	29	− 2·7
Dent	2808	2	61, Strand, London.	Dent's patent balance.	January 12	August 3	29	−11·8
Poole	3970	2	57, Fenchurch Street, London.	Poole's auxiliary.	January 12	August 3	29	− 1·5
Reid and Sons	1255	2	41, Grey Street, Newcastle-on-Tyne.	Auxiliary compensation to the balance.	January 12	August 3	29	−18·0
Bailey and Davison	1865	2	6, Side, Newcastle-on-Tyne.	Auxiliary compensation.	January 12	August 3	29	−10·5
Reid and Sons	1251	2	41, Grey Street, Newcastle-on-Tyne.	Auxiliary compensation to the balance.	January 12	August 3	29	− 9·5
Kullberg	906	2	12, Cloudesley Terrace, Islington, London.	Kullberg's flat rim balance, without auxiliary.	January 12	August 3	29	− 0·2
Campbell	1000	2	7, South Castle Street, Liverpool.	Ordinary construction, with slight alteration.	January 12	August 3	29	−16·5
Glover	330	2	4, Swinton Street, Gray's Inn Road, London.	Auxiliary compensation for high and low temperatures.	January 12	August 3	29	− 0·5
Dobbie	3987	2	24, Clyde Place, Glasgow.	Auxiliary to balance.	January 12	August 3	29	− 3·9
Hennessy	3745	2	5, Wind Street, Swansea.	Poole's auxiliary.	January 12	August 3	29	− 9·5
Campbell	1037	2	7, South Castle Street, Liverpool.	Ordinary construction, with slight alteration.	January 12	August 3	29	+ 4·0
Cairns	789	2	13, Waterloo Road, Liverpool.	Auxiliary to balance.	January 12	August 3	29	−19·1
W. P. Birchall	46	2	12a, Stonefield Street, Islington, London.	Ordinary construction, with slight alteration.	January 12	August 3	29	− 4·8
Russell and Son	9060	2	30 and 32, Slater Street, Liverpool.	Kullberg's flat rim balance, without auxiliary.	January 12	August 3	29	−15·7
Glover	321	2	4, Swinton Street, Gray's Inn Road, London.	Auxiliary compensation for all temperatures.	January 12	August 3	29	− 3·9
Kullberg	1060	2	12, Cloudesley Terrace, Islington, London.	Kullberg's flat rim balance, without auxiliary.	January 12	August 3	29	−17·7
Young	850	2	40, Park Lane, Liverpool.	Auxiliary compensation.	January 12	August 3	29	−10·0
Roberts	$\frac{12}{1260}$	2	34, Strand Street, Liverpool.	Kullberg's flat rim balance, without auxiliary.	January 12	August 3	29	−10·5
Clark and Son	3866	2	Greenock.	Auxiliary to balance.	January 12	August 3	29	−12·8
McGregor and Co.	4074	2	38, Clyde Place, Glasgow.	Auxiliary to balance.	January 12	August 3	29	+ 1·5
Webb	5444	2	4, Pullen's Row, Islington, London.	Auxiliary acting in cold.	January 12	August 3	29	−27·3
C. Frodsham	3345	2	84, Strand, London.	Usual balance, with continuous auxiliary.	January 12	August 3	29	− 3·8
Dent	2538	2	33, Cockspur Street, London.	Dent's balance.	January 12	August 3	29	−26·2
McMaster	1	2	97, Grafton Street, Dublin.	Ordinary construction.	January 12	August 3	29	−33·1
Sewill	2662	2	61, South Castle Street, Liverpool.	Improved balance.	January 12	August 3	29	−16·5
C. Frodsham	3392	2	84, Strand, London.	Usual balance, with supplementary compensation.	January 12	August 3	29	−23·4
M. F. Dent	24924	2	33, Cockspur Street, London.	Auxiliary acting in cold.	January 12	August 3	29	−13·0
McGregor and Co	3799	2	38, Clyde Place, Glasgow.	Auxiliary to balance.	January 12	August 3	29	− 5·0
Langford	1737	2	53, Broad Quay, Bristol.	Kullberg's flat rim balance, without auxiliary.	January 12	August 3	29	−31·0
Cairns	800	2	13, Waterloo Road, Liverpool.	Auxiliary to balance.	January 12	August 3	29	−16·8
Moore	4058	2	114, High Street, Belfast.	Auxiliary to balance.	January 12	August 3	29	−19·1
Muirhead and Son	4005	2	90, Buchanan Street, Glasgow.	Poole's auxiliary.	January 12	August 3	29	−22·0
Dell and Co.	1587	2	Broad Street, Bristol.	Original auxiliary compensation.	January 12	August 3	29	+10·0
Isaac	430	2	39, Essex Street, Islington, London.	Ordinary balance with slight addition, acting at all temperatures	January 12	August 3	29	− 7·7
Parkinson and Bouts	1096	2	59, Gracechurch Street, London.	Ordinary construction.	January 12	August 3	29	−14·7
Hewitt and Son	2554	2	12, John St., Mildmay Park, Kingsland, London.	Hartnup's balance.	January 12	August 3	29	−21·6
Hammersley	158	2	54, Spencer Street, Clerkenwell, London.	Flat rim balance: "tria in uno" balance spring.	January 12	August 3	29	+10·9
Brunton	567	2	3, America Sq., John St., Minories, London.	Hartnup's balance.	January 12	August 3	29	−12·2
Lister and Sons	625	2	Mosley Street, Newcastle-on-Tyne.	Poole's auxiliary.	January 12	August 3	29	−18·1
Shepherd and Son	1723	2	53, Leadenhall Street, London.	Auxiliary to balance acting in cold.	January 12	August 3	29	+ 2·1
Poole	3921	2	57, Fenchurch Street, London.	Poole's auxiliary.	January 12	August 3	29	− 5·9
Crisp	217	8	81, St. John Street Road, London.	Auxiliary compensation.	January 12	August 3	29	+30·0
Johannsen	1271	2	33, Arlington St., New North Rd., London.	Slight alteration in escapement; no auxiliary.	January 12	August 3	29	− 3·6
Webb	5458	2	4, Pullen's Row, Islington, London.	Auxiliary acting in heat.	January 12	August 3	29	−10·6
Birch	1615	2	173, Fenchurch Street, London.	Ordinary construction.	January 12	August 3	29	−30·8
Parkinson and Bouts	1087	2	59, Gracechurch Street, London.	Ordinary construction.	January 12	August 3	29	−21·0

In what Week.	Greatest Weekly Sum.	In what Week.	Difference between the Greatest and Least.	Greatest Difference between one Week and the next.	Before and after what day.	NAME OF MAKER.	No.
January 26 to Feb. 2*	− 1·1	March 23 to 30†	9·0	3·6	* January 26*	Sewill	2263
March 16 to 23†	+ 1·7	July 27 to Aug. 3	11·5	3·3	March 2†; † June 29†	Gowland	2870
January 12 to 19*	− 1·9	June 29 to July 6†	8·7	4·8	* January 19*	P. Birchall	1035
February 9 to 16	+ 20·0	April 13 to 20	10·5	5·8	* January 26*	Dent	3080
June 22 to 29†	+ 3·6	July 13 to 20	11·6	6·5	† July 6	Hennessy	3750
February 9 to 16	− 1·0	March 23 to 30†	11·1	7·2	* February 9	J. J. Muirhead	4006
February 9 to 16	+ 9·1	January 12 to 19*	11·8	6·9	† March 30	Lister and Sons	618
February 9 to 16	+ 3·8	July 13 to 20	15·6	5·1	May 11	Dent	2808
February 9 to 16	+ 15·1	July 13 to 20	16·6	5·4	March 2†	Poole	3970
February 16 to 23	− 2·4	January 12 to 19*	15·6	5·9	* February 9	Reid and Sons	1255
February 9 to 16	+ 3·2	July 27 to Aug. 3	13·7	6·9	* February 9	Bailey and Davison	1865
February 16 to 23	+ 6·2	July 6 to 13	15·7	7·0	† March 30	Reid and Sons	1251
January 26 to Feb. 2*	+ 13·1	January 12 to 19*	13·3	8·3	* January 26*	Kullberg	906
January 12 to 19*	+ 0·3	March 16 to 23†	16·8	7·0	* January 26*	Campbell	1000
February 2 to 9*	+ 16·7	July 13 to 20	17·2	7·2	July 13	Glover	330
January 12 to 19*	+ 16·4	July 20 to 27	20·3	7·6	June 8†	Dobbie	3987
January 26 to Feb. 2*	+ 13·5	July 6 to 13	23·0	6·8	May 4	Hennessy	3745
January 12 to 19*	+ 22·1	June 8 to 15†; June 15 to 22†	18·1	9·6	† July 6	Campbell	1037
February 16 to 23	+ 2·5	January 12 to 19*	21·6	9·0	* January 26*	Cairns	789
January 12 to 19*	+ 18·4	June 1 to 8	23·2	8·4	* January 26*	W. P. Birchall	46
February 9 to 16	+ 4·0	June 29 to July 6†	19·7	10·7	* January 26*	Russell and Son	9060
February 9 to 16	+ 26·0	June 29 to July 6†	29·9	6·0	† July 6	Glover	321
May 25 to June 1	+ 3·5	July 20 to 27	21·2	10·4	June 8†	Kullberg	1060
Feb. 9 to 16; Mar. 2 to 9†	+ 10·5	June 29 to July 6†	20·5	10·9	† July 6	Young	850
January 26 to Feb. 2*	+ 9·7	March 23 to 30†	20·2	12·2	† March 30	Roberts	$\frac{12}{1260}$
January 26 to Feb, 2*	+ 11·2	March 23 to 30†	24·0	10·4	March 2†	Clark and Son	3866
January 12 to 19*	+ 32·0	July 27 to Aug. 3	30·5	7·5	June 8†	McGregor and Co.	4074
June 29 to July 6†	− 6·4	May 4 to 11	20·9	13·0	March 2†	Webb	5444
January 26 to Feb. 2*	+ 27·0	June 29 to July 6†	30·8	9·0	June 8†	C. Frodsham	3345
June 8 to 15†	− 5·0	May 18 to 25; July 13 to 20	21·2	13·9	May 11	Dent	2538
January 19 to 26*	− 1·9	March 16 to 23†	31·2	10·1	† March 30	McMaster	1
March 9 to 16†	+ 12·7	July 27 to Aug. 3	29·2	11·3	† March 30	Sewill	2662
June 22 to 29†	− 0·1	July 20 to 27	23·3	14·5	† July 6	C. Frodsham	3392
January 12 to 19*	+ 16·5	June 29 to July 6†	29·5	11·5	† July 6	M. F. Dent	24924
January 12 to 19*	+ 22·3	July 13 to 20	27·3	12·7	† March 30	McGregor and Co.	3799
January 19 to 26*	+ 8·6	July 27 to Aug. 3	39·6	7·4	† March 9†	Langford	1737
January 12 to 19*	+ 13·9	July 27 to Aug. 3	30·7	12·1	June 8†	Cairns	800
January 12 to 19*	+ 14·9	July 27 to Aug. 3	34·0	12·3	* February 9	Moore	4058
Feb. 23 to March 2	+ 7·0	January 12 to 19*	29·0	15·9	† March 30	Muirhead and Son	4005
January 12 to 19*	+ 51·7	July 6 to 13	41·7	9·6	May 25	Dell and Co.	1587
March 16 to 23†	+ 24·0	July 27 to Aug. 3	31·7	14·6	† March 30	Isaac	430
June 22 to 29†	+ 16·1	March 9 to 16†	30·8	15·4	† June 22†	Parkinson and Bouts	1096
January 12 to 19*	+ 17·3	July 13 to 20	38·9	12·1	* January 26*	Hewitt and Son	2554
April 6 to 13	+ 46·1	June 8 to 15†	35·2	14·1	* January 26*	Hammersley	158
January 12 to 19*	+ 27·1	July 27 to Aug. 3	39·3	14·1	* January 26*	Brunton	567
January 12 to 19*	+ 12·1	July 27 to Aug. 3	30·2	19·9	March 2†	Lister and Sons	625
January 26 to Feb. 2*	+ 43·1	July 27 to Aug. 3	41·0	15·3	† July 6	Shepherd and Son	1723
January 26 to Feb. 2*	+ 30·5	July 13 to 20	36·4	18·5	March 2†	Poole	3921
January 12 to 19*	+ 78·9	July 20 to 27	48·9	14·6	* January 26*	Crisp	217
February 9 to 16	+ 39·7	July 6 to 13	43·3	17·7	† July 6	Johannsen	1271
July 6 to 13	+ 31·0	June 22 to 29†	41·6	30·0	† July 6	Webb	5458
January 12 to 19*	+ 66·0	June 22 to 29†	96·8	21·1	March 2†	Birch	1615
June 8 to 15†	+ 61·5	July 20 to 27	82·5	47·1	July 20	Parkinson and Bouts	1087

* During these weeks the North window of the Chronometer Room was left open.

† During these weeks the Chronometers were placed in the chamber of a stove heated by jets of gas. The gas flames are exterior to the chamber, into which none of the injurious products of combustion can enter.

The order of arrangement of the Chronometers in this Table is determined solely by consideration of their irregularities of rate.

The Chronometer Penlington 1729 was found stopped on July 16: it was removed by the maker on July 22, who found, on examination, that the main spring had broken. Roskell $\frac{1781}{68204}$ was found stopped on June 13: on removal by the maker on June 24 it was found that the oil at the upper staff pivot was dry. On account of the shorter duration of trial, the rates of these chronometers are not comparable with the rates of the other chronometers. They are in consequence placed in a separate division in Tables I. and II. and are omitted from the Abstract.

Two Chronometers which stopped during the first few weeks of trial are altogether omitted.

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