RATES OF CHRONOMETERS

ON TRIAL

FOR PURCHASE BY THE BOARD OF ADMIRALTY,

AT THE

ROYAL OBSERVATORY, GREENWICH.

FROM 1887 MARCH 5 TO 1887 JUNE 18.

(I.) WEEKLY RATES IN ORDER OF TIME.

NAME OF MAKER.	No.	Whether 2 or 8 Days.	Construction of Escapement and Balance, from the Description furnished by the Maker.	March 5—12	March 12—19	March 19—26	March 26 to April 2 †	April 2—9 †
Uhrig	458	2	Uhrig's continually acting auxiliary.	− 9·1	− 8·8	− 7·2	− 10·5	− 7·9
Mercer	4592	2	Auxiliary compensation.	− 18·9	− 16·5	− 17·4	− 18·3	− 16·3
C. Frodsham and Co.	0011	2	Ordinary balance.	− 9·3	− 9·8	− 7·9	− 9·9	− 10·7
Johnson and Son	3780	2	Auxiliary compensation acting in extremes of tem-	− 4·2	− 1·9	+ 0·7	+ 1·0	− 1·8
Johnson and Son	3779	2	perature.	+ 2·9	+ 4·6	+ 5·6	+ 4·7	+ 7·2
Hume	2013	2	Auxiliary compensation for heat.	+ 10·7	+ 11·3	+ 11·2	+ 4·1	+ 5·8
Kullberg	4689	2	Reversed detent, with short spring.	+ 6·6	+ 6·3	+ 5·3	+ 7·0	+ 7·2
Johannsen and Co.	3500	2	Auxiliary acting in heat and cold.	+ 3·1	+ 6·2	+ 2·8	0·0	+ 3·4
Johannsen and Co.	3516	2	Auxiliary acting in heat.	+ 5·9	+ 11·7	+ 8·8	+ 3·3	+ 4·9
Johannsen and Co.	3588	2	Auxiliary acting in heat and cold.	− 1·0	+ 2·2	+ 0·6	− 2·5	+ 3·1
Isaac	1670	2	Palladium balance spring.	− 2·4	− 2·7	− 2·8	+ 4·1	+ 6·7
Uhrig	450	2	Uhrig's continually acting auxiliary.	− 17·1	− 16·2	− 15·2	− 9·1	− 6·1
David Reid	1788	2	Auxiliary compensation.	− 17·2	− 16·1	− 16·4	− 22·3	− 18·6
Webster	16968	2	Palladium balance spring.	+ 4·2	+ 5·8	+ 7·1	+ 1·8	+ 4·4
Hume	2014	2	Auxiliary compensation.	+ 6·4	+ 8·6	+ 7·7	+ 3·7	+ 11·1
Pyott	887	2	Auxiliary compensation.	+ 2·1	+ 6·3	+ 6·5	+ 7·9	+ 9·9
Isaac	1688	2	Ordinary balance, bright steel spring.	− 11·7	− 13·7	− 10·3	− 10·4	− 9·2
Kullberg	4738	2	Reversed detent, with short spring.	+ 8·3	+ 8·8	+ 9·4	+ 7·5	+ 8·3
Oram and Son	18432	2	Auxiliary compensation.	− 4·7	− 4·0	− 2·0	− 10·3	− 7·5
Brockbank and Atkins	2038	8	Ordinary balance.	− 0·8	− 3·5	− 2·2	+ 5·4	+ 4·6
Mann	4603	2		− 8·1	− 9·8	− 7·4	− 2·2	− 1·6
Reid and Sons	867	2	Auxiliary compensation.	+ 5·0	+ 7·2	+ 5·1	− 0·1	− 1·0
Glover	366	2	Ordinary balance, with auxiliary acting in heat.	− 8·1	− 10·4	− 6·4	− 7·8	− 10·8
Edward and Sons	4936	2		+ 3·6	+ 1·1	+ 0·3	+ 5·9	+ 4·2
Williams	4465	2	Ordinary balance, with auxiliary compensation.	− 15·7	− 15·2	− 14·0	− 17·4	− 14·9
Davison	3367	2	Auxiliary compensation.	− 5·3	− 6·4	− 3·7	+ 7·2	+ 6·9
Keys	888	2	Improved balance.	+ 1·3	+ 5·8	+ 7·0	+ 6·5	+ 8·0
C. Frodsham and Co.	0012	2	Ordinary balance.	+ 5·8	+ 1·2	+ 3·2	− 8·0	− 9·0
Webster	16704	2	Ordinary balance.	− 9·3	− 8·6	− 5·9	− 11·8	− 18·6
Oram and Son	$\frac{1}{115}$	2	Ordinary balance.	+ 2·2	− 0·4	+ 2·3	+ 1·5	+ 4·1
Webb	510	2	Auxiliary compensation acting in heat.	− 6·5	− 6·5	− 4·7	− 13·1	− 6·2
Webb	513	2	Auxiliary compensation acting in heat.	+ 15·7	+ 16·0	+ 16·4	+ 13·2	+ 16·5
James Poole and Co.	5800	2	Poole's auxiliary.	− 14·9	− 21·2	− 19·6	− 22·5	− 21·3
Reid and Sons	5785	2	Poole's auxiliary.	+ 7·8	+ 15·8	+ 16·8	+ 6·0	+ 4·0
Hewitt	5626	2	Poole's auxiliary.	− 8·1	− 3·6	− 2·6	− 4·5	− 6·7
Sewill	4420	2	Ordinary balance.	− 12·0	− 16·1	− 10·2	− 2·0	− 2·7
Hewitt	5552	2	Poole's auxiliary.	− 1·7	− 0·1	+ 2·7	+ 8·0	+ 5·4
Keys	884	2	Auxiliary compensation.	+ 2·6	+ 2·9	+ 5·4	+ 4·1	+ 6·1
Brockbank and Atkins	2054	2	Ordinary balance.	− 7·1	− 16·8	− 9·9	− 4·7	− 4·1
Williams	8798	2	Ordinary balance, with auxiliary compensation.	+ 2·4	+ 3·7	+ 8·8	− 1·6	+ 0·5
Sewill	4419	2	Ordinary balance.	− 11·7	− 15·5	− 11·7	− 1·0	− 3·1
Sewill	4418	2	Ordinary balance.	− 14·8	− 16·6	− 13·3	− 8·0	− 8·8
Oram and Son	19181	2	Auxiliary compensation.	+ 0·4	+ 4·3	+ 4·8	+ 9·6	+ 12·7
Webster	15083	2	Ordinary balance.	− 4·6	+ 0·1	+ 2·0	− 9·7	− 6·9
Pyott	878	2	Ordinary balance with slight alteration.	+ 4·1	+ 7·1	+ 7·4	+ 4·6	+ 2·1
Mercer	4827	2	Auxiliary compensation.	− 9·3	− 10·5	− 5·7	− 9·5	− 9·2
David Reid	850	2	Auxiliary compensation.	− 10·8	− 0·1	+ 1·0	− 8·0	− 3·8
Oram and Son	19107	8	Ordinary balance.	+ 11·8	+ 8·1	+ 16·7	+ 16·0	+ 8·9
Klean and Co.	1006	2	Poole's auxiliary.	− 10·4	− 9·4	− 7·7	+ 12·6	+ 16·7
C. Frodsham and Co.	3600	8	Ordinary balance.	+ 2·2	+ 0·6	− 0·3	− 15·0	− 11·8
James Poole and Co.	5801	2	Poole's auxiliary.	− 11·6	− 13·0	− 10·8	+ 12·8	+ 13·1
Schoof	6059	2	Schoof's resilient lever escapement.	+ 2·5	+ 9·1	+ 21·8	− 7·8	− 5·7
Chronometrical Thermometer			......	+ 1330·4	+ 1579·2	+ 1324·8	− 2282·0	− 2640·3
Mean Weekly Temperature			......	47°·6	45°·2	48°·3	89°·4	92°·6
Extremes of Temperature as shown by the Self-Registering Thermometers			......	44°·0—54°·0	40°·4—51°·5	39°·0—55°·2	88°·0—90°·3	88°·2—94°·9

April 9—16 †	April 16—23	April 23—30	April 30 to May 7	May 7—14 †	May 14—21 †	May 21—28 †	May 28 to June 4	June 4—11	June 11—18	NAME OF MAKER.	No.
− 8·5	− 8·1	− 9·9	− 10·7	− 12·1	− 8·9	− 7·5	− 9·0	− 10·8	− 11·3	Uhrig	458
− 18·9	− 15·1	− 13·1	− 12·9	− 14·2	− 13·8	− 15·8	− 14·8	− 18·0	− 14·0	Mercer	4592
− 12·5	− 15·2	− 13·6	− 13·7	− 11·1	− 12·5	− 12·9	− 11·8	− 8·3	− 7·0	C. Frodsham and Co.	0011
+ 1·6	− 2·3	+ 3·2	+ 4·1	+ 1·0	− 1·0	+ 1·7	+ 0·9	− 3·7	− 2·0	Johnson and Son	3780
+ 7·7	+ 1·6	+ 3·9	+ 6·6	+ 10·5	+ 8·2	+ 8·5	+ 6·2	+ 8·6	+ 10·2	Johnson and Son	3779
+ 6·7	+ 5·2	+ 8·1	+ 8·8	+ 6·3	+ 8·7	+ 9·1	+ 3·9	+ 3·3	+ 2·9	Hume	2013
+ 8·6	+ 11·4	+ 6·6	+ 4·4	+ 10·8	+ 13·0	+ 14·5	+ 9·1	+ 7·6	+ 9·3	Kullberg	4689
+ 5·4	− 1·4	+ 1·4	+ 4·2	+ 5·6	+ 6·6	+ 7·5	+ 0·6	+ 3·6	− 1·6	Johannsen and Co.	3500
+ 5·1	− 0·4	+ 2·4	+ 6·2	+ 2·4	+ 4·8	+ 4·5	+ 1·5	+ 6·7	+ 6·3	Johannsen and Co.	3516
+ 5·3	− 0·6	− 1·3	+ 0·2	− 1·1	+ 3·0	+ 2·5	− 1·0	− 1·1	− 6·6	Johannsen and Co.	3588
+ 4·4	+ 3·3	+ 2·1	+ 1·9	− 3·2	+ 0·5	+ 0·5	− 2·4	− 3·2	− 3·4	Isaac	1670
− 5·2	− 8·0	− 9·0	− 9·2	− 8·0	− 6·5	− 6·3	− 8·7	− 10·4	− 10·3	Uhrig	450
− 18·4	− 21·5	− 20·4	− 18·1	− 21·5	− 14·6	− 15·3	− 22·5	− 24·2	− 25·3	David Reid	1788
+ 2·7	− 0·3	− 1·3	− 2·3	+ 2·0	+ 1·5	+ 2·0	− 5·0	− 4·8	− 3·9	Webster	16968
+ 14·9	+ 13·8	+ 14·1	+ 13·3	+ 11·0	+ 14·9	+ 15·3	+ 13·6	+ 14·0	+ 13·8	Hume	2014
+ 12·5	+ 11·8	+ 9·7	+ 11·6	+ 17·2	+ 16·8	+ 10·2	+ 11·3	+ 15·5	+ 18·3	Pyott	887
− 7·7	− 4·6	− 5·6	− 4·9	− 5·7	− 5·5	− 2·7	+ 2·4	+ 3·9	+ 6·4	Isaac	1688
+ 8·0	+ 17·7	+ 18·3	+ 18·5	+ 10·3	+ 9·6	+ 9·0	+ 17·5	+ 16·1	+ 14·9	Kullberg	4738
− 3·7	− 1·5	+ 1·1	+ 4·3	− 4·0	− 1·6	+ 0·5	+ 0·1	− 0·1	− 1·5	Oram and Son	18432
+ 5·1	+ 4·3	+ 5·8	+ 7·1	+ 6·5	+ 4·9	+ 6·0	+ 8·5	+ 12·1	+ 12·8	Brockbank and Atkins	2038
− 2·7	− 0·9	+ 0·4	+ 0·5	− 0·8	− 3·0	− 3·4	+ 4·1	+ 6·9	+ 8·8	Mann	4603
+ 0·3	− 8·0	− 4·1	− 2·5	+ 1·4	+ 0·9	+ 2·5	− 6·8	− 1·7	+ 3·5	Reid and Sons	867
− 12·9	− 7·7	− 9·1	− 8·1	− 11·5	− 16·9	− 18·8	− 7·9	− 5·8	− 6·8	Glover	336
+ 2·6	+ 9·0	+ 10·4	+ 12·2	+ 8·2	+ 3·8	+ 2·9	+ 12·4	+ 14·9	+ 16·4	Edward and Sons	4936
− 13·2	− 22·7	− 22·7	− 18·5	− 18·9	− 19·5	− 19·0	− 27·9	− 29·0	− 29·3	Williams	4465
+ 4·8	− 1·0	− 1·4	− 0·4	+ 4·1	+ 1·6	− 1·3	− 2·8	+ 3·1	+ 5·9	Davison	3367
+ 11·9	+ 0·7	+ 4·8	+ 14·4	+ 13·8	+ 10·7	+ 10·9	+ 1·0	+ 5·3	+ 8·2	Keys	888
− 9·2	− 5·4	− 8·1	− 8·8	− 6·9	− 8·4	− 7·1	− 4·7	− 5·7	− 0·3	C. Frodsham and Co.	0012
− 21·7	− 10·5	− 11·5	− 10·8	− 17·6	− 20·1	− 20·4	− 9·9	− 7·5	− 7·4	Webster	16704
+ 7·1	+ 12·0	+ 10·0	+ 9·8	+ 3·9	+ 3·6	+ 4·2	+ 13·5	+ 11·6	+ 14·9	Oram and Son	$\frac{1}{115}$
− 2·8	− 0·3	+ 2·1	+ 3·3	− 7·2	− 3·3	+ 1·3	+ 0·9	− 6·0	− 15·1	Webb	510
+ 17·7	+ 24·8	+ 28·5	+ 28·4	+ 23·9	+ 30·6	+ 30·9	+ 25·1	+ 16·2	+ 8·9	Webb	513
− 21·4	− 9·3	− 7·3	− 6·6	− 18·4	− 20·9	− 20·0	− 11·6	− 11·3	− 13·7	James Poole and Co.	5800
+ 3·4	+ 2·6	+ 5·3	+ 5·2	+ 4·4	− 0·1	+ 0·4	− 2·9	+ 1·0	+ 5·3	Reid and Sons	5785
− 9·5	− 15·4	− 16·0	− 13·3	− 12·4	− 21·8	− 25·3	− 24·7	− 19·5	− 13·6	Hewitt	5626
− 5·8	− 8·1	− 8·2	− 6·8	− 0·6	− 2·0	− 1·5	− 0·7	+ 5·6	+ 9·1	Sewill	4420
+ 2·6	− 6·3	− 5·3	− 4·6	+ 4·5	+ 7·1	+ 7·8	− 6·1	− 2·0	+ 2·3	Hewitt	5552
+ 8·0	− 2·3	+ 4·3	+ 8·9	+ 11·3	+ 11·4	+ 15·0	+ 7·4	+ 15·2	+ 20·7	Keys	884
− 4·7	− 5·5	− 2·4	− 0·3	− 1·7	− 4·3	− 4·1	+ 0·3	+ 6·1	+ 8·0	Brockbank and Atkins	2054
− 1·3	+ 7·5	+ 12·5	+ 11·6	− 3·6	− 3·4	− 3·0	+ 8·2	+ 3·6	− 0·9	Williams	8798
− 3·4	− 4·7	− 5·9	− 4·1	+ 0·9	− 3·0	− 1·9	+ 3·4	+ 8·4	+ 12·2	Sewill	4419
− 8·4	+ 1·9	+ 1·1	− 3·0	− 8·5	− 10·4	− 8·2	+ 4·5	+ 7·1	+ 8·1	Sewill	4418
+ 16·7	+ 9·1	+ 10·4	+ 8·8	+ 12·2	+ 18·9	+ 21·2	+ 7·7	− 2·3	− 0·5	Oram and Son	19181
− 7·9	− 9·4	− 10·7	− 12·8	− 15·2	− 11·5	− 13·1	− 22·5	− 26·2	− 25·1	Webster	15083
− 2·7	+ 6·8	+ 19·0	+ 19·6	+ 4·0	− 0·2	+ 1·6	+ 12·7	+ 10·7	+ 13·2	Pyott	878
− 8·0	+ 1·5	+ 4·2	+ 9·9	+ 1·9	− 0·6	− 0·7	+ 12·4	+ 16·5	+ 18·6	Mercer	4827
− 0·5	+ 16·7	+ 17·6	+ 16·3	− 1·7	− 5·1	+ 1·5	+ 15·6	+ 8·5	− 4·5	David Reid	850
+ 4·9	+ 15·7	+ 22·1	+ 23·7	+ 16·0	+ 10·5	+ 9·5	+ 27·8	+ 36·5	+ 33·7	Oram and Son	19107
+ 15·6	+ 1·0	0·0	+ 0·1	+ 12·9	+ 11·9	+ 12·9	+ 7·0	+ 14·2	+ 17·8	Klean and Co.	1006
− 3·4	+ 10·2	+ 9·9	+ 9·2	− 12·2	− 11·7	− 9·2	+ 12·3	+ 3·0	− 1·6	C. Frodsham and Co.	3600
+ 12·0	+ 4·8	+ 4·4	+ 6·0	+ 12·8	+ 12·9	+ 17·7	+ 10·8	+ 8·3	+ 9·2	James Poole and Co.	5801
− 7·0	+ 16·9	+ 23·7	+ 23·9	− 0·6	− 4·0	− 3·8	+ 23·7	+ 25·9	+ 25·6	Schoof	6059
− 2738·3	+ 736·3	+ 834·5	+ 823·9	− 2446·6	− 2813·3	− 2908·2	+ 449·5	− 75·0	− 468·2	Chronometrical Thermometer.	
93°·7	54°·3	52°·9	53°·3	89°·8	93°·6	94°·3	58°·0	63°·6	68°·3	Mean Weekly Temperature.	
92°·0—95°·0	48°·0—58°·0	50°·0—57°·2	49°·3—59°·0	88°·0—91°·0	90°·2—95°·8	92°·0—96°·0	54°·9—61°·9	60°·3—66°·5	64°·1—71°·8	Extremes of Temperature as shown by the Self-Registering Thermometers.	

The sign + indicates that the rate is gaining.

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

The Chronometrical Thermometer differs from an ordinary Chronometer only in the construction of the balance, the positions of the metals forming the compensating rims being reversed. By this arrangement the effect of temperature is much magnified.

The Chronometers are placed in order of merit, their respective positions being determined by consideration of the irregularities of rate exhibited in Table III.

NAME OF MAKER.	No.	Whether 2 or 8 Days.	Construction of Escapement and Balance from the Description furnished by the Maker.	(II.) WEEKLY RATES IN THE March 12—19	March 5—12	March 19—26	April 23—30	April 30 to May 7
Uhrig	458	2	Uhrig's continually acting auxiliary.	− 8ˢ·8	− 9ˢ·1	− 7ˢ·2	− 9ˢ·9	− 10ˢ·7
Mercer	4592	2	Auxiliary compensation.	− 16·5	− 18·9	− 17·4	− 13·1	− 12·9
C. Frodsham and Co.	0011	2	Ordinary balance.	− 9·8	− 9·3	− 7·9	− 13·6	− 13·7
Johnson and Son	3780	2	Auxiliary compensation acting in extremes of temperature.	− 1·9	− 4·2	+ 0·7	+ 3·2	+ 4·1
Johnson and Son	3779	2		+ 4·6	+ 2·9	+ 5·6	+ 3·9	+ 6·6
Hume	2013	2	Auxiliary compensation for heat.	+ 11·3	+ 10·7	+ 11·2	+ 8·1	+ 8·8
Kullberg	4689	2	Reversed detent, with short spring.	+ 6·3	+ 6·6	+ 5·3	+ 6·6	+ 4·4
Johannsen and Co.	3500	2	Auxiliary acting in heat and cold.	+ 6·2	+ 3·1	+ 2·8	+ 1·4	+ 4·2
Johannsen and Co.	3516	2	Auxiliary acting in heat.	+ 11·7	+ 5·9	+ 8·8	+ 2·4	+ 6·2
Johannsen and Co.	3588	2	Auxiliary acting in heat and cold.	+ 2·2	− 1·0	+ 0·6	− 1·3	+ 0·2
Isaac	1670	2	Palladium balance spring.	− 2·7	− 2·4	− 2·8	+ 2·1	+ 1·9
Uhrig	450	2	Uhrig's continually acting auxiliary.	− 16·2	− 17·1	− 15·2	− 9·0	− 9·2
David Reid	1788	2	Auxiliary compensation.	− 16·1	− 17·2	− 16·4	− 20·4	− 18·1
Webster	16968	2	Palladium balance spring.	+ 5·8	+ 4·2	+ 7·1	− 1·3	+ 2·3
Hume	2014	2	Auxiliary compensation.	+ 8·6	+ 6·4	+ 7·7	+ 14·1	+ 13·3
Pyott	887	2	Auxiliary compensation.	+ 6·3	+ 2·1	+ 6·5	+ 9·7	+ 11·6
Isaac	1688	2	Ordinary balance, bright steel spring.	− 13·7	− 11·7	− 10·3	− 5·6	− 4·9
Kullberg	4738	2	Reversed detent, with short spring.	+ 8·8	+ 8·3	+ 9·4	+ 18·3	+ 18·5
Oram and Son	18432	2	Auxiliary compensation.	+ 4·0	+ 4·7	+ 2·0	+ 1·1	+ 4·3
Brockbank and Atkins	2038	8	Ordinary balance.	− 3·5	− 0·8	− 2·2	+ 5·8	+ 7·1
Mann	4603	2		− 9·8	− 8·1	− 7·4	+ 0·4	+ 0·5
Reid and Sons	867	2	Auxiliary compensation. -	+ 7·2	+ 5·0	+ 5·1	− 4·1	− 2·6
Glover	366	2	Ordinary balance, with auxiliary acting in heat.	+ 10·4	+ 8·1	− 6·4	− 9·1	− 8·1
Edward and Sons	4936	2		+ 1·1	+ 3·6	+ 2·2	+ 10·4	+ 12·2
Williams	4465	2	Ordinary balance, with auxiliary compensation.	− 15·2	− 15·7	− 14·0	− 22·7	− 18·5
Davison	3367	2	Auxiliary compensation.	− 6·4	− 5·3	− 3·7	− 1·4	− 0·4
Keys	888	2	Improved balance.	+ 5·8	+ 1·3	+ 7·0	+ 4·8	+ 14·4
C. Frodsham and Co.	0012	2	Ordinary balance.	+ 1·2	+ 1·8	+ 3·2	− 8·1	− 8·8
Webster	16704	2	Ordinary balance.	+ 8·6	+ 9·3	+ 8·5	+ 11·6	+ 10·8
Oram and Son	1/4	2	Ordinary balance.	− 0·4	+ 2·2	+ 2·3	+ 10·0	+ 9·8
Webb	510	2	Auxiliary compensation acting in heat.	− 6·5	− 6·5	− 4·7	+ 2·1	+ 3·3
Webb	513	2	Auxiliary compensation acting in heat.	+ 16·0	+ 15·7	+ 16·4	+ 28·5	+ 28·4
James Poole and Co.	5800	2	Poole's auxiliary.	− 21·2	− 14·9	− 19·6	+ 7·3	+ 6·6
Reid and Sons	5785	2	Poole's auxiliary.	+ 15·8	+ 7·8	+ 16·8	+ 5·3	+ 5·2
Hewitt	5626	2	Poole's auxiliary.	− 3·6	− 8·1	− 2·6	+ 16·0	+ 13·3
Sewill	4420	2	Ordinary balance.	− 16·1	− 12·0	− 10·2	− 8·2	− 6·8
Hewitt	5552	2	Poole's auxiliary.	− 0·1	− 1·7	+ 2·7	− 5·3	− 4·6
Keys	884	2	Auxiliary compensation.	+ 2·9	+ 2·6	+ 5·4	+ 4·3	+ 8·9
Brockbank and Atkins	2054	2	Ordinary balance.	− 16·8	− 7·1	+ 9·9	− 2·4	− 0·3
Williams	8798	2	Ordinary balance, with auxiliary compensation.	+ 3·7	+ 2·4	+ 8·8	+ 12·5	+ 11·6
Sewill	4419	2	Ordinary balance.	− 15·5	− 11·7	− 11·7	− 5·9	− 4·1
Sewill	4418	2	Ordinary balance.	− 16·6	− 14·8	− 13·3	+ 1·1	− 3·0
Oram and Son	19181	2	Auxiliary compensation.	+ 4·3	+ 0·4	+ 4·8	+ 10·4	+ 8·8
Webster	15083	2	Ordinary balance.	+ 0·1	+ 4·6	+ 2·0	+ 10·7	+ 12·8
Pyott	878	2	Ordinary balance, with slight alteration.	+ 7·1	+ 4·1	+ 7·4	+ 19·0	+ 19·6
Mercer	4827	2	Auxiliary compensation.	− 10·5	− 9·3	− 5·7	+ 4·2	+ 9·9
David Reid	850	2	Auxiliary compensation.	− 0·1	− 10·8	+ 1·0	+ 17·6	+ 16·3
Oram and Son	19107	8	Ordinary balance.	+ 8·1	+ 11·8	+ 16·7	+ 22·1	+ 23·7
Klean and Co.	1006	2	Poole's auxiliary.	− 9·4	− 10·4	− 7·0	+ 0·0	+ 0·1
C. Frodsham and Co.	3600	8	Ordinary balance.	+ 0·6	+ 2·2	− 0·3	+ 9·9	+ 9·2
James Poole and Co.	5801	2	Poole's auxiliary.	− 13·0	− 11·6	− 10·8	+ 4·4	+ 6·0
Schoof	6059	2	Schoof's resilient lever escapement.	+ 9·1	+ 2·5	+ 21·8	+ 23·7	+ 23·9
Chronometrical Thermometer			. . . . .	+ 1579·2	+ 1330·4	+ 1324·8	+ 834·5	+ 823·9
Mean Weekly Temperature			. . . . .	45°·2	47°·6	48°·3	52°·9	53°·8
Extremes of Temperature as shown by the Self-Registering Thermometers			. . . . .	40°·4—61°·5	44°·0—54°·0	39°·0—55°·2	50°·0—57°·2	49°·3—59°·0

The sign + indicates that the rate is gaining.

† 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 Chronometrical Thermometer differs from an ordinary Chronometer only in the construction of the balance, the positions of the metals forming the compensating rims being reversed. By this arrangement the effect of temperature is much magnified.

ORDER OF TEMPERATURE AS DETERMINED GENERALLY BY THE CHRONOMETRICAL THERMOMETER.

April 16—23	May 28 to June 4	June 4—11	June 11—18	March 26 to April 2 †	May 7—14 †	April 2—9 †	April 9—16 †	May 14—21 †	May 21—28 †	NAME OF MAKER.	No.
− 8ˢ·1	− 9ˢ·0	− 10ˢ·8	− 11ˢ·3	− 10ˢ·5	− 12ˢ·1	− 7ˢ·9	− 8ˢ·5	− 8ˢ·9	− 7ˢ·5	Uhrig	458
− 15·1	− 14·8	− 18·0	− 14·0	− 18·3	− 14·2	− 18·3	− 19·9	− 13·8	− 13·8	Mercer	4592
− 15·2	− 11·8	− 8·3	− 7·0	− 9·3	− 11·1	− 10·7	− 12·5	− 12·5	− 12·9	C. Frodsham and Co.	0011
− 2·3	+ 0·9	− 3·7	− 2·0	+ 1·0	+ 1·0	− 1·8	+ 1·6	− 1·0	+ 1·7	Johnson and Son	3780
+ 1·6	+ 6·2	+ 8·6	+ 10·2	+ 4·7	+ 10·5	+ 7·2	+ 7·7	+ 8·2	+ 8·5	Johnson and Son	3779
+ 5·2	+ 3·9	+ 3·3	+ 2·9	+ 4·1	+ 6·3	+ 5·8	+ 6·7	+ 8·7	+ 9·1	Hume	2013
+ 11·4	+ 9·1	+ 7·6	+ 9·3	+ 7·0	+ 10·8	+ 7·2	+ 8·6	+ 13·0	+ 14·5	Kullberg	4689
+ 1·4	+ 0·6	+ 3·6	− 1·6	0·0	+ 5·6	+ 3·4	+ 6·4	+ 6·6	+ 7·5	Johannsen and Co.	3500
− 0·4	+ 1·5	+ 6·7	+ 6·3	+ 3·3	+ 2·4	+ 4·9	+ 5·1	+ 4·8	+ 4·5	Johannsen and Co.	3516
− 0·6	− 1·0	− 1·1	− 6·6	− 2·5	− 1·1	+ 3·1	+ 5·3	+ 3·0	+ 2·5	Johannsen and Co.	3588
+ 3·3	− 2·4	− 3·2	− 3·4	+ 4·1	− 3·2	+ 6·7	+ 4·4	+ 0·5	+ 0·5	Isaac	1670
− 8·0	− 8·7	− 10·4	− 10·3	− 9·1	− 8·0	− 6·1	− 5·2	− 6·8	− 6·3	Uhrig	450
− 21·5	− 32·5	− 24·2	− 25·3	− 22·3	− 21·5	− 18·6	− 18·4	− 14·5	− 14·8	David Reid	1788
− 0·3	− 5·0	− 4·8	− 3·9	+ 1·8	+ 2·0	+ 4·4	+ 2·7	+ 1·5	+ 2·0	Webster	16968
+ 13·8	+ 13·6	+ 14·0	+ 13·8	+ 3·7	+ 11·0	+ 11·1	+ 14·9	+ 14·9	+ 15·8	Hume	2014
+ 11·8	+ 14·3	+ 16·5	+ 18·3	+ 7·9	+ 17·2	+ 9·9	+ 12·5	+ 16·8	+ 19·2	Pyott	887
− 4·6	+ 2·4	+ 3·9	+ 6·4	− 10·4	− 5·7	+ 9·2	+ 7·7	+ 5·8	− 2·7	Isaac	1688
+ 17·7	+ 17·5	+ 18·1	+ 14·9	+ 5·6	+ 10·3	+ 9·3	+ 8·0	+ 9·6	+ 9·0	Kullberg	4738
− 1·5	0·1	0·1	1·5	− 10·3	− 4·0	− 7·5	− 3·7	− 1·6	+ 0·5	Oram and Son	18432
+ 4·3	+ 8·5	+ 12·1	+ 12·8	+ 5·4	+ 6·5	+ 4·6	+ 5·1	+ 4·9	+ 6·0	Brockbank and Atkins	2038
− 0·9	+ 4·1	+ 6·9	+ 8·8	− 2·2	− 0·8	− 1·6	− 2·7	− 3·0	− 3·4	Mann	4603
− 8·0	− 6·8	− 1·7	+ 3·5	− 0·1	+ 1·4	− 1·0	+ 0·3	+ 0·9	+ 2·5	Reid and Sons	867
− 7·7	− 7·9	− 6·3	− 7·8	− 11·5	− 10·8	− 12·9	− 10·9	− 10·9	− 13·8	Glover	366
+ 9·0	+ 13·4	+ 14·9	+ 16·4	+ 5·9	+ 8·2	+ 4·2	+ 2·6	+ 3·8	+ 2·9	Edward and Sons	4936
− 22·7	− 27·9	− 29·0	− 29·3	− 17·4	− 18·9	− 14·9	− 13·2	− 19·5	− 19·0	Williams	4465
− 1·0	− 2·8	+ 3·1	+ 5·9	+ 7·2	+ 4·1	+ 6·9	+ 4·8	+ 1·6	− 1·3	Davison	3367
+ 0·7	+ 1·0	+ 5·3	+ 8·2	+ 6·6	+ 13·8	+ 8·0	+ 11·9	+ 10·7	+ 10·9	Keys	888
− 5·4	− 4·7	− 5·7	− 3·1	+ 3·8	+ 6·9	+ 9·0	+ 8·4	+ 9·3	+ 9·3	C. Frodsham and Co.	0012
− 10·4	− 9·9	− 7·5	− 7·4	− 11·8	− 17·6	− 18·6	− 21·7	− 20·1	− 20·4	Webster	16704
+ 12·0	+ 15·5	+ 11·6	+ 14·9	+ 1·5	+ 3·9	+ 4·1	+ 7·1	+ 3·6	+ 4·2	Oram and Son	1/4
− 0·3	+ 0·9	− 6·0	− 15·1	− 13·1	− 7·2	− 6·2	− 2·8	− 3·3	+ 1·3	Webb	510
+ 24·8	+ 25·1	+ 16·2	+ 8·9	+ 13·2	+ 23·9	+ 16·5	+ 17·7	+ 30·6	+ 30·9	Webb	513
− 9·3	− 11·6	− 11·3	− 13·7	− 22·5	− 18·4	− 21·3	− 21·4	− 20·9	− 20·0	James Poole and Co.	5800
+ 2·6	+ 2·9	+ 1·0	+ 6·2	+ 6·0	+ 4·4	+ 4·0	+ 3·4	− 0·1	+ 0·4	Reid and Sons	5785
− 15·4	− 24·7	− 19·5	− 13·6	− 4·5	− 12·4	− 6·7	− 9·5	− 21·8	− 25·3	Hewitt	5626
− 8·1	− 0·7	+ 5·6	+ 9·1	− 2·0	− 0·6	− 2·7	− 5·8	− 2·0	− 1·5	Sewill	4420
− 6·3	− 6·1	− 2·0	+ 2·3	+ 8·0	+ 4·5	+ 5·4	+ 2·6	+ 7·1	+ 7·8	Hewitt	5552
− 2·3	+ 7·4	+ 15·2	+ 20·7	+ 4·1	+ 11·3	+ 6·1	+ 8·0	+ 11·4	+ 15·0	Keys	884
− 5·5	+ 0·3	+ 6·1	+ 8·0	− 4·7	− 1·7	− 4·1	− 4·7	− 4·3	− 4·1	Brockbank and Atkins	2054
+ 7·5	+ 8·2	+ 3·6	− 0·9	− 1·6	− 3·6	+ 0·5	− 1·3	− 3·4	− 3·0	Williams	8798
− 4·7	+ 3·4	+ 8·4	+ 12·2	− 1·0	+ 0·9	− 3·1	− 3·4	− 3·0	− 1·9	Sewill	4419
+ 1·9	+ 4·5	+ 7·1	+ 8·1	+ 8·0	+ 8·5	+ 8·8	+ 8·4	+ 10·4	+ 8·2	Sewill	4418
+ 9·1	+ 7·7	− 2·3	− 0·5	+ 9·6	+ 12·2	+ 13·7	+ 16·7	+ 18·9	+ 21·2	Oram and Son	19181
− 9·4	+ 22·3	+ 23·2	+ 25·1	− 9·7	− 16·2	− 6·9	− 7·9	− 11·5	− 13·1	Webster	15083
+ 6·8	+ 12·7	+ 10·7	+ 13·2	+ 4·6	+ 4·0	+ 2·1	+ 2·7	− 0·2	+ 1·6	Pyott	878
+ 1·5	+ 12·4	+ 16·5	+ 18·6	− 9·5	+ 1·9	− 9·2	− 8·0	− 0·6	− 0·7	Mercer	4827
+ 16·7	+ 15·6	+ 8·5	− 4·5	− 8·0	− 1·7	− 3·8	− 0·5	− 5·1	+ 1·5	David Reid	850
+ 15·7	+ 27·8	+ 36·5	+ 33·7	+ 16·0	+ 16·0	+ 8·9	+ 4·9	+ 10·5	+ 9·5	Oram and Son	19107
+ 1·0	+ 7·0	+ 14·2	+ 17·8	+ 12·6	+ 13·9	+ 10·7	+ 7·6	+ 11·9	+ 13·9	Klean and Co.	1006
+ 10·2	+ 12·3	+ 3·0	− 1·6	− 15·0	− 12·2	− 11·8	− 3·4	− 11·7	− 9·2	C. Frodsham and Co.	3600
+ 4·8	+ 10·8	+ 8·3	+ 9·2	+ 12·8	+ 12·8	+ 13·1	+ 12·0	+ 12·9	+ 17·7	James Poole and Co.	5801
+ 16·9	+ 23·7	+ 25·9	+ 25·6	− 7·8	− 0·6	− 5·7	− 7·0	− 4·0	− 3·8	Schoof	6059
+ 736·3	+ 449·5	− 7ˢ·5·0	− 468·2	− 2282·0	− 2446·6	− 2640·3	− 2738·3	− 2813·3	− 2905·2	Chronometrical Thermometer.	
54°·3	58°·0	63°·6	68°·3	89°·4	89°·8	92°·6	93°·7	93°·6	94°·3	Mean Weekly Temperature.	
48°·0—58°·0	54°·9—61°·9	60°·3—68°·5	64°·1—71°·8	88°·0—90°·3	88°·0—91°·0	88°·2—94°·9	92°·0—95°·0	90°·2—95°·8	92°·0—96·0	Extremes of Temperature, as shown by the Self-Registering Thermometers.	

The Chronometers are placed in order of merit, their respective positions being determined by consideration of the irregularities of rate exhibited in Table III.

NAME OF MAKER.	No.	Whether 2 or 8 Days.	ADDRESS OF MAKER.	Construction of Escapement and Balance, from the Description furnished by the Maker.	(III.) ABSTRACT OF Least Weekly Rate.	Extremes of Temperature.
						° °
Uhrig	458	2	8. Quadrant Road, Essex Road, N.	Uhrig's continually acting auxiliary.	— 12·1	88·0—91·0
Mercer	4592	2	Prospect Road, St. Albans, Herts.	Auxiliary compensation.	— 18·9	44·0—54·0 / 92·0—95·0
C. Frodsham and Co.	0011	2	84, Strand, W.C.	Ordinary balance.	— 15·2	48·0—58·0
Johnson and Son	3780	2	35, Victoria Street, Derby.	Auxiliary compensation acting in extremes of temperature.	— 4·2	44·0—54·0
Johnson and Son	3779	2	35, Victoria Street, Derby.		+ 1·6	48·0—58·0
Hume	2013	2	No. 6 Side, near the Quay, Newcastle-on-Tyne.	Auxiliary compensation for heat.	+ 2·9	64·1—71·8
Kullberg	4689	2	105, Liverpool Road, N.	Reversed detent, with short spring.	+ 4·4	49·3—59·0
Johannsen and Co.	3500	2	149, Minories, E.C.	Auxiliary acting in heat and cold.	— 1·6	64·1—71·8
Johannsen and Co.	3516	2	149, Minories, E.C.	Auxiliary acting in heat.	— 0·4	48·0—58·0
Johannsen and Co.	3588	2	149, Minories, E.C.	Auxiliary acting in heat and cold.	— 6·6	64·1—71·8
Isaac	1670	2	10, Spencer Street, Clerkenwell, E.C.	Palladium balance spring.	— 3·4	64·1—71·8
Uhrig	450	2	8, Quadrant Road, Essex Road, N.	Uhrig's continually acting auxiliary.	— 17·1	44·0—54·0
David Reid	1788	2	39, Grey Street, Newcastle-on-Tyne.	Auxiliary compensation.	— 25·3	64·1—71·8
Webster	16968	2	5, Queen Victoria Street, E.C.	Palladium balance spring.	— 5·0	54·9—61·9
Hume	2014	2	No. 6 Side, near the Quay, Newcastle-on-Tyne.	Auxiliary compensation.	+ 3·7	88·0—90·3
Pyott	887	2	74, West India Dock Road, E.	Auxiliary compensation.	+ 2·1	44·0—54·0
Isaac	1688	2	10, Spencer Street, Clerkenwell, E.C.	Ordinary balance: bright steel spring.	— 13·7	40·4—51·5
Kullberg	4738	2	105, Liverpool Road, N.	Reversed detent, with short spring.	+ 7·5	88·0—90·3
Oram and Son	18432	2	19, Wilmington Square, W.C.	Auxiliary compensation.	— 10·3	88·0—90·3
Brockbank and Atkins	2038	8	6, Cowper's Court, Cornhill, E.C.	Ordinary balance.	— 3·5	40·4—51·5
Mann	4603	2	The Cross, Gloucester.		— 9·8	40·4—51·5
Reid and Sons	867	2	41, Grey Street, Newcastle-on-Tyne.	Auxiliary compensation.	— 8·0	48·0—58·0
Glover	366	2	8, Wrotham Road, Camden New Town.	Ordinary balance, with auxiliary acting in heat.	— 18·8	92·0—96·0
Edward and Sons	4936	2	1, Poultry, E.C.		+ 0·3	39·0—55·2
Williams	4465	2	3, Bute Docks, Cardiff.	Ordinary balance, with auxiliary compensation.	— 29·3	64·1—71·8
Davison	3367	2	No. 6 Side, near the Quay, Newcastle-on-Tyne.	Auxiliary compensation.	— 6·4	40·4—51·5
Keys	888	2	15, Craven Street, Strand, W.C.	Improved balance.	+ 0·7	48·0—58·0
C. Frodsham and Co.	0012	2	84, Strand, W.C.	Ordinary balance.	— 9·2	92·0—95·0
Webster	16704	2	5, Queen Victoria Street, E.C.	Ordinary balance.	— 21·7	92·0—95·0
Oram and Son	11/715	2	19, Wilmington Square, W.C.	Ordinary balance.	— 0·4	40·4—51·5
Webb	510	2	90, High Street, Islington, N.	Auxiliary compensation acting in heat.	— 15·1	64·1—71·8
Webb	513	2	90, High Street, Islington, N.	Auxiliary compensation acting in heat.	+ 8·9	64·1—71·8
James Poole and Co.	5800	2	33, Spencer Street, Clerkenwell, E.C.	Poole's auxiliary.	— 22·5	88·0—90·3
Reid and Sons	5785	2	41, Grey Street, Newcastle-on-Tyne.	Poole's auxiliary.	— 2·9	54·9—61·9
Hewitt	5626	2	4, Spencer Street, Clerkenwell, E.C.	Poole's auxiliary.	— 25·3	92·0—96·0
Sewill	4420	2	30, Cornhill, E.C.	Ordinary balance.	— 16·1	40·4—51·5
Hewitt	5552	2	4, Spencer Street, Clerkenwell, E.C.	Poole's auxiliary.	— 6·3	48·0—58·0
Keys	884	2	15, Craven Street, Strand, W.C.	Auxiliary compensation.	— 2·3	48·0—58·0
Brockbank and Atkins	2054	2	6, Cowper's Court, Cornhill, E.C.	Ordinary balance.	— 16·8	40·4—51·5
Williams	8798	2	3, Bute Docks, Cardiff.	Ordinary balance, with auxiliary compensation.	— 3·6	88·0—91·0
Sewill	4419	2	30, Cornhill, E.C.	Ordinary balance.	— 15·5	40·4—51·5
Sewill	4418	2	30, Cornhill, E.C.	Ordinary balance.	— 16·6	40·4—51·5
Oram and Son	19181	2	19, Wilmington Square, W.C.	Auxiliary compensation.	— 2·3	60·3—66·5
Webster	15083	2	5, Queen Victoria Street, E.C.	Ordinary balance.	— 26·2	60·3—66·5
Pyott	878	2	74, West India Dock Road, E.	Ordinary balance, with slight alteration.	— 2·7	92·0—95·0
Mercer	4827	2	Prospect Road, St. Albans, Herts.	Auxiliary compensation.	— 10·5	40·4—51·5
David Reid	850	2	39, Grey Street, Newcastle-on-Tyne.	Auxiliary compensation.	— 10·8	44·0—54·0
Oram and Son	19107	8	19, Wilmington Square, W.C.	Ordinary balance.	+ 4·9	92·0—95·0
Klean and Co.	1006	2	70, Myddleton Street, Clerkenwell, E.C.	Poole's auxiliary.	— 10·4	44·0—54·0
C. Frodsham and Co.	3600	8	84, Strand, W.C.	Ordinary balance.	— 15·0	88·0—90·3
James Poole and Co.	5801	2	33, Spencer Street, Clerkenwell, E.C.	Poole's auxiliary.	— 13·0	40·4—51·5
Schoof	6059	2	99, St. John's Street Road, E.C.	Schoof's resilient lever escapement.	— 7·8	88·0—90·3

The sign + indicates that the rate is gaining.

THE PRINCIPAL CHANGES OF RATE DURING THE 15 WEEKS.

Mean Temperature.	Greatest Weekly Rate.	Extremes of Temperature.	Mean Temperature.	Difference between the Greatest and Least. (a)	Greatest Difference between one Week and the next. (b)	Mean Temperatures for these two Weeks.	$a + 2b$.	NAME OF MAKER.	No.
89·8	— 7·2	39·0 — 55·2	48·3	4·9	3·3	48·3 — 89·4	11·5	Uhrig	458
47·6 / 93·7	— 12·9	49·3 — 59·0	53·8	6·0	4·0	63·6 — 68·3	14·0	Mercer	4592
54·3	— 7·0	64·1 — 71·8	68·3	8·2	3·5	58·0 — 63·6	15·2	C. Frodsham and Co.	0011
47·6	+ 4·1	49·3 — 59·0	53·8	8·3	5·5	54·3 — 52·9	19·3	Johnson and Son	3780
54·3	+ 10·5	88·0 — 91·0	89·8	8·9	6·1	93·7 — 54·3	21·1	Johnson and Son	3779
68·3	+ 11·3	40·4 — 51·5	45·2	8·4	7·1	48·3 — 89·4	22·6	Hume	2013
53·8	+ 14·5	92·0 — 96·0	94·3	10·1	6·4	53·8 — 89·8	22·9	Kullberg	4689
68·3	+ 7·5	92·0 — 96·0	94·3	9·1	6·9	94·3 — 58·0	22·9	Johannsen and Co.	3500
54·3	+ 11·7	40·4 — 51·5	45·2	12·1	5·8	47·6 — 45·2	23·7	Johannsen and Co.	3516
68·3	+ 5·3	92·0 — 95·0	93·7	11·9	5·9	93·7 — 54·3	23·7	Johannsen and Co.	3588
68·3	+ 6·7	88·2 — 94·9	92·6	10·1	6·9	48·3 — 89·4	23·9	Isaac	1670
47·6	— 5·2	92·0 — 95·0	93·7	11·9	6·1	48·3 — 89·4	24·1	Uhrig	450
68·3	— 14·6	90·2 — 95·8	93·6	10·7	7·2	94·3 — 58·0	25·1	David Reid	1788
58·0	+ 7·1	39·0 — 55·2	48·3	12·1	7·0	94·3 — 58·0	26·1	Webster	16968
89·4	+ 15·3	92·0 — 96·0	94·3	11·6	7·4	89·4 — 92·6	26·4	Hume	2014
47·6	+ 19·2	92·0 — 96·0	94·3	17·1	5·6	53·8 — 89·8	28·3	Pyott	887
45·2	+ 6·4	64·1 — 71·8	68·3	20·1	5·1	94·3 — 58·0	30·3	Isaac	1688
89·4	+ 18·5	49·3 — 59·0	53·8	11·0	9·7	93·7 — 54·3	30·4	Kullberg	4738
89·4	+ 4·3	49·3 — 59·0	53·8	14·6	8·3	53·8 — 89·8	31·2	Oram and Son	18432
45·2	+ 12·8	64·1 — 71·8	68·3	16·3	7·6	48·3 — 89·4	31·5	Brockbank and Atkins	2038
45·2	+ 8·8	64·1 — 71·8	68·3	18·6	7·5	94·3 — 58·0	33·6	Mann	4603
54·3	+ 7·2	40·4 — 51·5	45·2	15·2	9·3	94·3 — 58·0	33·8	Reid and Sons	867
94·3	— 5·8	60·3 — 66·5	63·6	13·0	10·9	94·3 — 58·0	34·8	Glover	366
48·3	+ 16·4	64·1 — 71·8	68·3	16·1	9·5	94·3 — 58·0	35·1	Edward and Sons	4936
68·3	— 13·2	92·0 — 95·0	93·7	16·1	9·5	93·7 — 54·3	35·1	Williams	4465
45·2	+ 7·2	88·0 — 90·3	89·4	13·6	10·9	48·3 — 89·4	35·4	Davison	3367
54·3	+ 14·4	49·3 — 59·0	53·8	13·7	11·2	93·7 — 54·3	36·1	Keys	888
93·7	+ 5·8	44·0 — 54·0	47·6	15·0	11·2	48·3 — 89·4	37·4	C. Frodsham and Co.	0012
93·7	— 5·9	39·0 — 55·2	48·3	15·8	11·2	93·7 — 54·3	38·2	Webster	16704
45·2	+ 15·5	54·9 — 61·9	58·0	15·9	11·3	94·3 — 58·0	38·5	Oram and Son	11/715
68·3	+ 3·3	49·3 — 59·0	53·8	18·4	10·5	53·8 — 89·8	39·4	Webb	510
68·3	+ 30·9	92·0 — 96·0	94·3	22·0	8·9	58·0 — 63·6	39·8	Webb	513
89·4	— 6·6	49·3 — 59·0	53·8	15·9	12·1	93·7 — 54·3	40·1	James Poole and Co.	5800
58·0	+ 16·8	39·0 — 55·2	48·3	19·7	10·8	48·3 — 89·4	41·3	Reid and Sons	5785
94·3	— 2·6	39·0 — 55·2	48·3	22·7	9·4	89·8 — 93·6	41·5	Hewitt	5626
45·2	+ 9·1	64·1 — 71·8	68·3	25·2	8·2	48·3 — 89·4	41·6	Sewill	4420
54·3	+ 8·0	88·0 — 90·3	89·4	14·3	13·9	94·3 — 58·0	42·1	Hewitt	5552
54·3	+ 20·7	64·1 — 71·8	68·3	23·0	10·3	93·7 — 54·3	43·6	Keys	884
45·2	+ 8·0	64·1 — 71·8	68·3	24·8	9·7	47·6 — 45·2	44·2	Brockbank and Atkins	2054
89·8	+ 12·5	50·0 — 57·2	52·9	16·1	15·2	53·8 — 89·8	46·5	Williams	8798
45·2	+ 12·2	64·1 — 71·8	68·3	27·7	10·7	48·3 — 89·4	49·1	Sewill	4419
45·2	+ 8·1	64·1 — 71·8	68·3	24·7	12·7	94·3 — 58·0	50·1	Sewill	4418
63·6	+ 21·2	92·0 — 96·0	94·3	23·5	13·5	94·3 — 58·0	50·5	Oram and Son	19181
63·6	+ 2·0	39·0 — 55·2	48·3	28·2	11·7	48·3 — 89·4	51·6	Webster	15083
93·7	+ 19·6	49·3 — 59·0	53·8	22·3	15·6	53·8 — 89·8	53·5	Pyott	878
45·2	+ 18·6	64·1 — 71·8	68·3	29·1	13·1	94·3 — 58·0	55·3	Mercer	4827
47·6	+ 17·6	50·0 — 57·2	52·9	28·4	18·0	53·8 — 89·8	64·4	David Reid	850
93·7	+ 36·5	60·3 — 66·5	63·6	31·6	18·3	94·3 — 58·0	68·2	Oram and Son	19107
47·6	+ 17·8	64·1 — 71·8	68·3	28·2	20·3	48·3 — 89·4	68·8	Klean and Co.	1006
89·4	+ 12·3	54·9 — 61·9	58·0	27·3	21·5	94·3 — 58·0	70·3	C. Frodsham and Co.	3600
45·2	+ 17·7	92·0 — 96·0	94·3	30·7	23·6	48·3 — 89·4	77·9	James Poole and Co.	5801
89·4	+ 25·9	60·3 — 66·5	63·6	33·7	29·6	48·3 — 89·4	92·9	Schoof	6059

The Chronometers are placed in order of merit, their respective positions being determined by consideration of the irregularities of rate exhibited in the Table above.