

## ELECTRIC CLOCKS.

"ARON" SELF-WINDING.



There are three different systems of installing Electric Clocks.

**FIRST SYSTEM.** With one Master Clock, which is all that is necessary, but as this system has suffered in the past from the single Master Clock stopping and consequently the whole System failing, we strongly advise—

**SECOND SYSTEM.** The Patent "Duplex" System, in which there are two Master Clocks and corresponding subsidiary apparatus. This System, listed on pages 1622-1623 is free from the above-mentioned defects, since the two Master Clocks can be arranged independently so that, should one fail, the other immediately takes up the work. The extra expense is amply compensated for by the above mentioned advantages.

In these two Systems **there is absolutely no variation between any of the clocks throughout the whole building.** There is no need to regulate more than the one or two Master Clocks (as the case may be) and no attention whatever need be given to the sub-dials. **In this way correct time is always assured.** There is no hand winding and the energy consumed is negligible, only about **one unit in ten years.**

**THIRD SYSTEM.** This consists of self-contained electrically wound and driven Clocks which perform the same functions as ordinary timepieces. They are actuated either

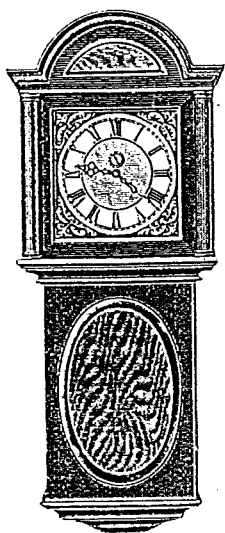
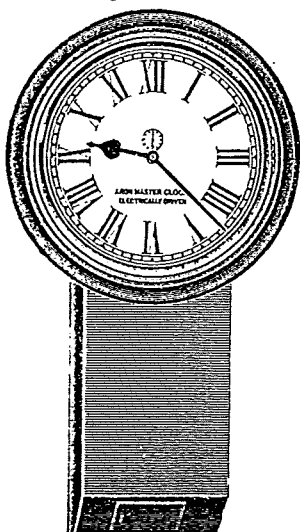
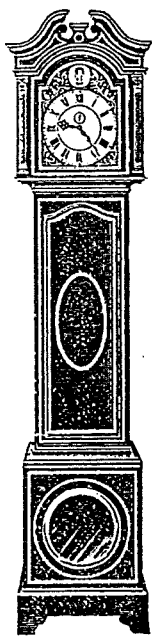
- (a) From the electric light mains direct
- (b) From primary batteries
- (c) From accumulators.

In these Clocks the electric winding gear first winds up a reserve spring contained in the clockwork, after which it continues to drive the clock itself, and if at any time the current is cut off the reserve spring comes into action and will drive the clock for a period of about 48 hours, so that there is never any danger of the clock stopping owing to temporary derangement of the circuit. **These clocks need not be looked at from one year's end to another.**

The energy consumed is only about one unit in ten years. This System is listed on page 1624.

The "Aron" Clocks supplied under all these Systems are of exceptionally high quality, mounted in Standard Clock Cases of high grade finish and are of English make throughout.

Full particulars will be furnished on application.

ELECTRIC  
CLOCKS.K 9460/2  
(Height 37 inches.)K 9466/74  
(Height 37 inches)

Height, 6-ft. 4-in.

## ELECTRIC CLOCKS.

"ARON" SELF-WINDING.

## MASTER REGULATORS.

80 BEATS PER MINUTE.

Cat. No.	Description.	Price each.		
		£	s.	d.
	<b>MAHOGANY OR OAK CASE.</b>			
K <b>9460</b>	With $\frac{1}{4}$ -minute Contacts ... ..	13	2	6
K <b>9461</b>	„ $\frac{1}{2}$ -minute „ ... ..	12	12	0
K <b>9462</b>	„ 1-minute „ ... ..	12	1	6
	EXTRA for Cases fitted with bevelled Plate Glass Fronts showing Pendulum ... ..	1	1	0

RAILWAY OR BOARD ROOM TYPE—MAHOGANY CASE  
80 BEATS PER MINUTE.

Cat. No.	Diam. of Dial.	Description.	Price each.		
			£	s.	d.
		<b>MAHOGANY CASE.</b>			
K 9466	16-in.	With $\frac{1}{4}$ -minute Contacts ... ..	9	12	6
K 9467	20-in.	" $\frac{1}{4}$ -minute " ... ..	11	2	6
K 9468	24-in.	" $\frac{1}{4}$ -minute " ... ..	12	7	6
K 9469	16-in.	" $\frac{1}{2}$ -minute " ... ..	9	2	6
K 9470	20-in.	" $\frac{1}{2}$ -minute " ... ..	10	12	6
K 9471	24-in.	" $\frac{1}{2}$ -minute " ... ..	11	17	6
K 9472	16-in.	" 1-minute " ... ..	8	12	6
K 9473	20-in.	" 1-minute " ... ..	10	2	6
K 9474	24-in.	" 1-minute " ... ..	11	7	6

## MINIATURE GRANDFATHER TYPE.

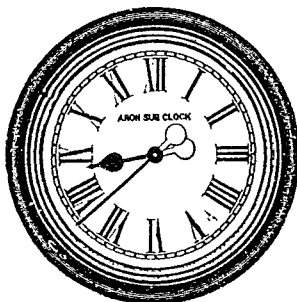
Cat. No.	Description.				Price each.		
MAHOGANY OR OAK CASE.					£	s.	d.
K 9505	¼-minute Contacts	...	60 beats per minute	...	25	14	6
K 9506	½ " "	...	ditto	...	25	4	0
K 9507	1 " "	...	ditto	...	24	13	6
K 9508	¼ " "	...	80 beats per minute	...	21	10	6
K 9509	½ " "	...	ditto	...	21	0	0
K 9510	1 " "	...	ditto	...	20	9	6

Both the above patterns can be used on our **Special Duplex System**, necessitating the use of two Master Clocks known as Principal and Secondary Masters, and the following extras:—

On the price of Principal Master ... .. £2 2 0  
 On the price of Secondary Master ... .. 4 4 0  
 Synchronising Relay, £4 4 0

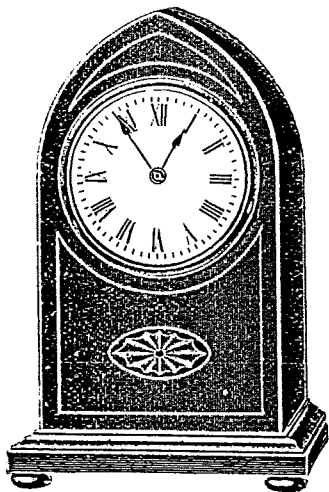
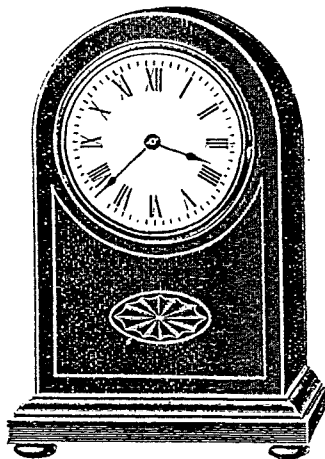
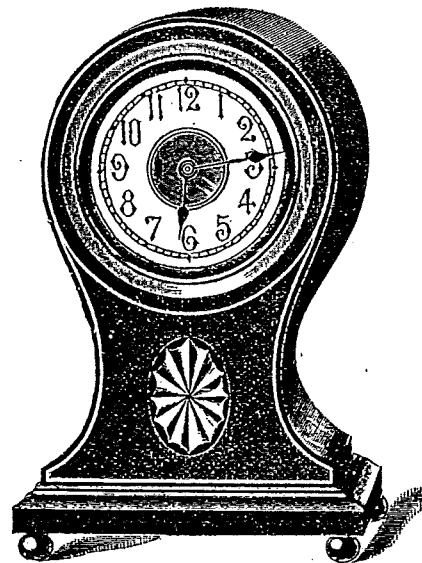
**ELECTRIC CLOCKS.****ELECTRIC  
CLOCKS.****"ARON" SELF-WINDING.****SECONDARY OR SUB CLOCKS.**

For use with the Masters shown on page 1622.

**K. 9482/7**

Cat. No.	Diam. of Dial.	Description.	Price each.
<b>*MAHOGANY OR OAK CASES.</b>			
K 9482	8, 10 or 12-in.	Enamelled Iron Dial, Aluminium Hands	£ s. d. 2 10 0
K 9483	16-in.	" " " "	With ... 4 7 6
K 9484	20-in.	" " " "	1/2-minute ... 5 12 6
K 9485	24-in.	" " " "	Contacts ... 6 12 6
K 9486	30-in.	" " " "	... 8 12 6
K 9487	36-in.	" " " "	... 11 10 0
	8, 10, 12 or 16-in.	EXTRA for 1/2-minute Impulses	... 7 6
	20-36-in.	" " " "	... 12 6

\* Also supplied in Brass Cases.

**PRICES ON APPLICATION.****K 9516****K 9517****K 9518****Mantelpiece Clocks with Inlaid Mahogany Cases. "Sheraton" Style, with 1/2-minute Contacts.**

Cat. No.	Dia. of Dial.	Description.	Price each.
K 9516	4-in.	Gothic Case 10-in. x 6-in.	£ s. d. 2 12 6

Cat. No.	Dia. of Dial.	Description.	Price each.
K 9517	4-in.	Round Top Case 10-in x 6-in.	£ s. d. 2 12 6

Cat. No.	Dia. of Dial.	Description.	Price each.
K 9518	4-in.	Balloon Shape 10-in. x 6-in.	£ s. d. 2 12 6

Superior finish, 10/6 extra on above prices.  
 If with 1 minute contacts, 10/6 less than above prices.  
 " 1/2 " " " 10/6 extra on above prices.

ELECTRIC  
CLOCKS.

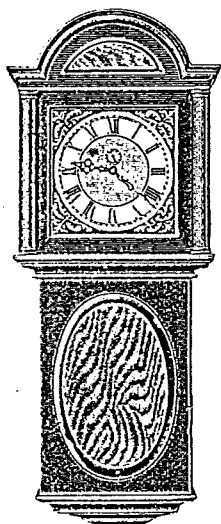
## ELECTRIC CLOCKS.

"ARON" SELF WINDING.

## SELF-CONTAINED CLOCKS.

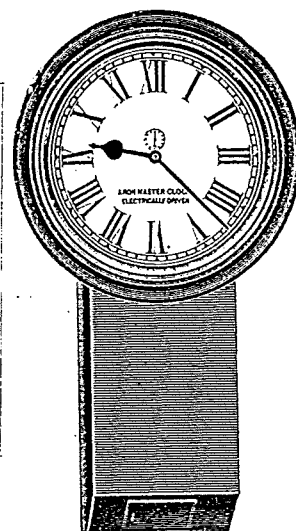
For attaching to **Electric Light Circuits** of any voltage, either alternating or continuous current. In these Clocks the electrical winding gear first winds up a reserve spring contained in the clockwork; after which it continues to drive the clock itself, the power of the reserve spring not being used unless current is for any reason cut off, when the spring will drive the clock for a period of about 48 hours.

These Clocks can also be arranged to work off **Primary or Secondary Batteries**, in which case, however, Reserve Spring is not fitted, because batteries are never disconnected.



K 9523

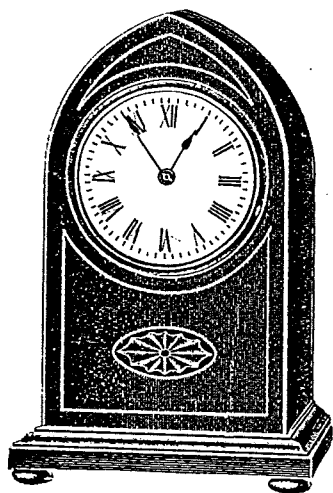
Cat. No.	Description.	Price each.
K 9523	Case and Finish as K 9460 ... ..	£ s. d. 10 10 0
K 9524	16-in. Dial, "Board Room" Type, Case and Finish as K 9466 ... ..	7 10 0
K 9525	20-in. Dial, ditto ditto ...	9 0 0
K 9526	24-in. Dial, ditto ditto ...	10 5 0
K 9527	Miniature Grandfather, Case and Finish as K 9505/10 60 beats per minute	23 2 6
K 9528	Ditto ditto 80 " " "	18 18 0



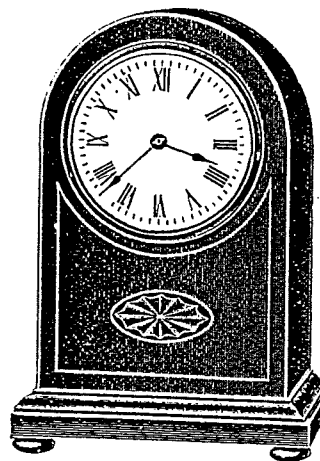
K 9524/6

## MANTELPiece CLOCKS WITH INLAID MAHOGANY CASES.

"Sheraton" Style with best quality French Lever Movement.



K 9521



K 9522

Cat. No.	Dial.	Description.	Price each.
K 9521	3½-in. Convex Enamelled Dial.	Gothic pattern Case, complete with electric winding gear and Battery.	£ s. d. 3 3 0

Cat. No.	Dial.	Description.	Price each.
K 9522	3½-in. Convex Enamelled Dial.	Round Top Case, complete with electric winding gear and battery.	£ s. d. 3 3 0

The energy consumed by these "Electrically-wound" Clocks is very small indeed, amounting to about ONE UNIT IN 10 YEARS, as the winding gear operates only once every 8 to 10 minutes for a fraction of a second.