N° 4522 A.D. 1894

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COMPLETE SPECIFICATION.

Improvements in Electrically Operated Clocks.

A communication from HENRI CAMPICHE, of Geneva, Republic of Switzerland.

I, ALFRED JULIUS BOULT of 323 High Holborn in the County of Middlesex, Chartered Patent Agent, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This improved electrically operated clock, like other clocks of the same kind comprises a toothed wheel acted upon at regular intervals of time by a click or pawl set into motion by means of an electric current passing temporarily through an electro-magnet, the arbour of said toothed wheel bearing the minute-hand and imparting rotation to the hour-hand by means of the usual train of gearing.

The accompanying drawing is a back-view of such an electrically operated clock, and indicates two different positions of the click A supported by the armature B of the electro-magnet C. The shape and arrangement of the click A constitutes the main part of this invention, but the working of the same could not be represented without the help of the other parts of the clock.

The click A hinged at a to the armature B is acted upon through an arm a^2 by means of a weak metallic spiral spring D which is intended for the double purpose of swinging the said click A so as to make it engage its free end with the teeth of the wheel E, and of lifting up again the armature B when the electric current no longer flows through in the electro-magnet C that is to say each time the said armature has been depressed.

The spring D has the tendency to bring back the click A and the armature B to the respective positions indicated in dotted lines, whilst the electric current passing through the electro-magnet, tends to bring the armature B and the click A to the respective positions indicated in full lines.

The head of the click A is provided with a projection a^1 and is shaped so as to stop the wheel E when the said projection a^1 meets an abutment or stop F after the click has caused the wheel E to advance to the extent of one tooth. The combination of the head of the click A of the shape indicated the spring D and the abutment F realizes in the simplest possible way an absolutely irreproachable working of the jump of the hands. Whilst the armature B is lifted and the click A raised to catch the next tooth of the wheel E the latter is held in its place by means of a click G provided with a weak spring g which prevents the wheel E from making any retrograde movement.

Having now particularly described and ascertained the nature of the said invention as communicated to me by my foreign correspondent, and in what manner the same is to be performed, I declare that what I claim is:—

1. In an electrically operated clock a click or pawl A with a projection such as a^1 in combination with a spring D and a stop or abutment F substantially as and for the purpose described.

2. In a clock such as described the combination with the driving ratchet wheel E of a click or pawl such as A a^1 a^2 operated electrically and by a spring substantially as described and illustrated in the accompanying drawing.

Dated this 3rd day of March 1894.

W. P. THOMPSON & BOULT,
Agents for the Applicant.

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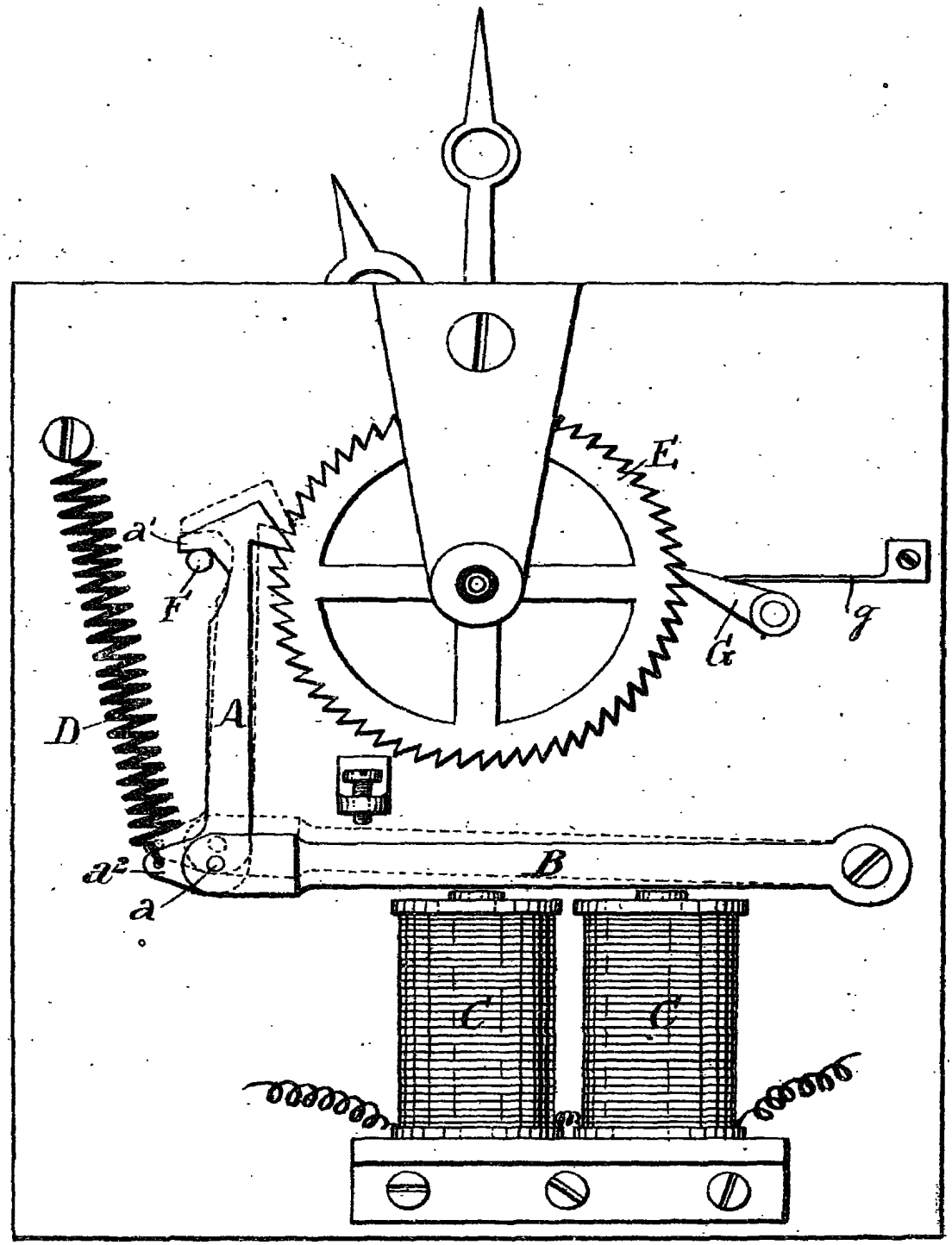
[*Price 8d.*]



[This Drawing is a reproduction of the Original on a reduced scale.]

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