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PROVISIONAL SPECIFICATION.

Improvements in Electrically Driven Clocks and other Electrically Driven Running Mechanisms.

We, ROBERT MANN LOWNE, of No. 108, Bromley Road, Catford, in the County of Kent, Scientific Instrument Maker, and THE LOWNE ELECTRIC CLOCK & APPLIANCES COMPANY, LIMITED, of the same address, do hereby declare the nature of this invention to be as follows:—

This invention relates to improvements in electrically driven clocks and other electrically driven running mechanisms.

One important feature of the present invention consists in an improved method of connecting the electrically operated urging device to the mechanism to be driven, such as, for example, the escapement mechanism of a clock.

Another important feature of this invention consists in special means for silencing the movements of the mechanism which occur on the making and breaking of the electric circuit.

Referring to the first mentioned feature, a terminal of an electric circuit undergoes continuous movement, by the escapement or other operated mechanism, towards another terminal, which latter, when contact is made, recedes from the former to be again approached, and so on successively, and, on the recess of the second mentioned terminal, a medium for urging the escapement or other mechanism, interposed between the carriers of the two terminals, receives an access of energy.

Such a mechanism may be arranged and operated as follows:—

A spindle of the escapement or other mechanism is angularly advanced by the strain of a spring which, at intervals is subjected to an increase of strain through the medium of an electro-magnet, the strain of the spring undergoing gradual reduction by the movement of the driven mechanism.

Before the strain of the spring has been eliminated, an electric circuit, which includes the winding of the said electro-magnet, is completed by the approach of one terminal carried by the driving spindle of the escapement or other mechanism towards another terminal carried by an electrically urged spindle.

On the completion of the circuit, the armature of the electro magnet is displaced in opposition to the strain of a spring or gravity, the first effect of the displacement being the breaking of the electric circuit, permitting the spring to immediately cause the recess of the armature from the pole or poles of the magnet and again complete the circuit.

The recess of the armature under the pull of the spring causes the electrically urged spindle before mentioned to be advanced a step and, whilst renewing the strain of the spring which drives the escapement or other mechanism, also breaks the electric circuit by separating the terminal carried by the electrically urged spindle from the terminal which is carried by the spindle of the escapement or other mechanism.

By such means the former terminal is caused to intermittently recede from

[*Price 8d.*]