

B. F. KESSLER.
 CONTACT DEVICE FOR ELECTRICALLY WOUND MECHANISMS.
 APPLICATION FILED FEB. 9, 1909.

947,821.

Patented Feb. 1, 1910.

Fig. 1.

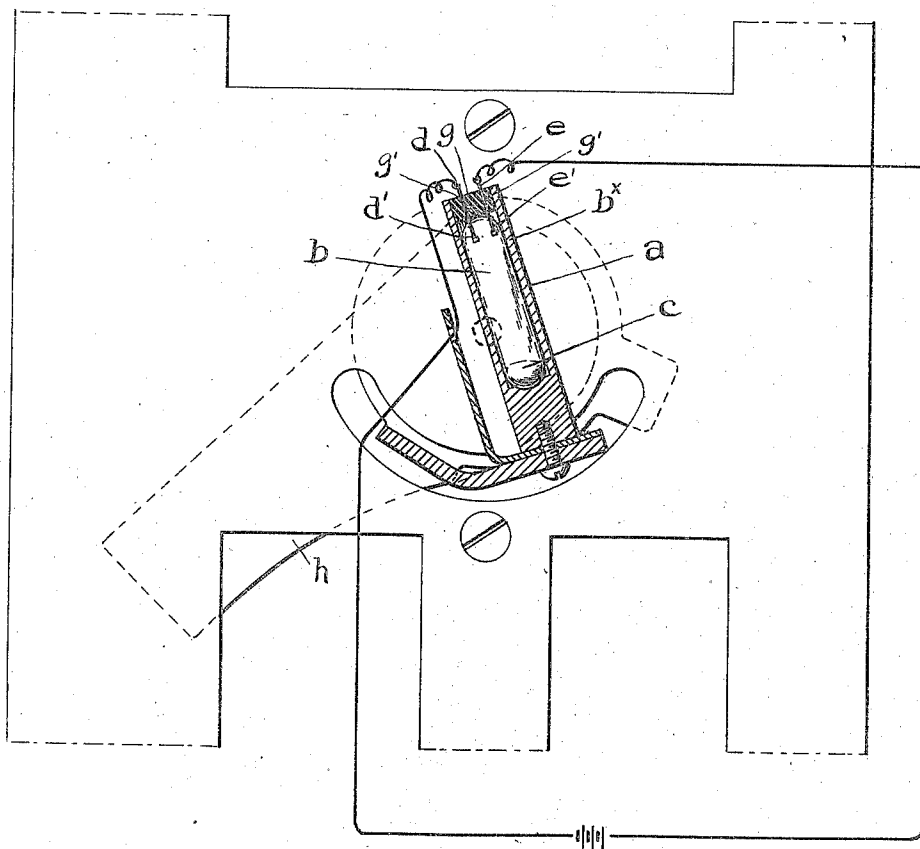


Fig. 2.

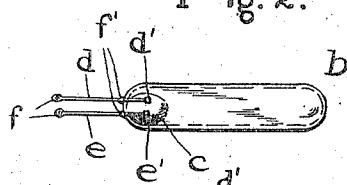
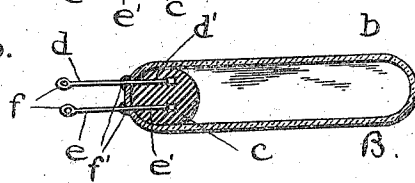


Fig. 3.



Witnesses

Stuart Hilder.
 George M. Anderson.

Inventor

B. F. Kessler

C. W. Anderson

his Attorney

UNITED STATES PATENT OFFICE.

BENJAMIN F. KESSLER, OF MOUNT CARMEL, PENNSYLVANIA.

CONTACT DEVICE FOR ELECTRICALLY-WOUND MECHANISMS.

947,821.

Specification of Letters Patent.

Patented Feb. 1, 1910.

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To all whom it may concern:

Be it known that I, BENJAMIN F. KESSLER, a citizen of the United States, resident of Mount Carmel, in the county of Northumberland and State of Pennsylvania, have made a certain new and useful Invention in Contact Devices for Electrically-Wound Mechanisms; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a sectional view showing my invention as applied. Fig. 2 is a detail view of the liquid contact chamber. Fig. 3 is a longitudinal sectional view of the same on a larger scale.

The invention relates to certain new and useful improvements in electrically wound clocks and other electrically wound mechanisms, and particularly relates to the so-called liquid contact chamber of the invention disclosed in U. S. Patent Number 830,473, dated Sept. 4, 1906.

In the liquid contact chamber of the patent referred to it has been found in practice that objectionable corroding action is set up within the chamber, which results in interference with the circuit making and breaking to such extent as to render the operation of the clock unreliable.

My invention has for its object to overcome this objectionable corroding action and to render the clock a reliable timepiece.

The invention consists in the novel construction and combinations of parts as hereinafter set forth.

In the accompanying drawings, illustrating the invention, the letter *a*, designates the liquid contact chamber which consists in the present case of a glass tube or hollow chamber *b*, sealed at each end by the material of which it is composed, and wherein the mercury *c*, forming the medium through which the electrical connection is established, is located and has movement from one end of the chamber to the other.

A tubular protective and inclosing casing *b*^{*}, of brass or other suitable material, is provided for the glass chamber *b*, and through which the connection with the mechanism for moving the chamber is made.

At the end of the chamber *b*, which is the upper end when the circuit is broken, are located the two straight parallel electrodes *d*, and *e*, which are preferably platinum wires and have their inner ends *d'*, and *e'*, with which the mercury contacts in making the circuit, sealed within the glass chamber, small holes being first made in the chamber or tube, and the platinum wire electrodes inserted and sealed in position by means of glass cement *f'*, *f'*. The outer ends of the electrodes project beyond the glass chamber and are provided with eyes or loops *f*, *f*, for the wiring connections. In this way the circuit is made and broken and the operation of the clock is otherwise the same as in the patent referred to while there can be possible and is no corrosion of the electrodes nor of the liquid contact chamber or tube.

The invention is applicable to any electrically wound mechanism.

A non-conducting plug *g*, fits in one end of the tubular casing over the liquid contact chamber therein and is provided with perforations *g'*, *g'*, through which the electrodes *d*, and *e*, project and with the walls of which they have bracing contact. The rocking arm *h*, of the electrically wound mechanism is attached to the end of the tubular casing opposite the plugged end thereof.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

In an electrically wound mechanism of the character set forth, the combination with a tubular glass contact-chamber having at one end straight parallel platinum electrodes extending into said chamber, projecting beyond the end thereof and terminating in wiring attachment loops, a mercury body within said chamber, a tubular casing neatly fitting and entirely covering said glass contact chamber, a rocking arm attached to one end of said casing, and a non-conducting plug closing the other end of said casing and having perforations through which said electrodes project and with the walls of which they have bracing contact.

In testimony whereof I affix my signature, in presence of two witnesses.

B. F. KESSLER.

Witnesses:

RICHARD A. CURTIN,
GEORGE M. ANDERSON.