

No. 803,704.

PATENTED NOV. 7, 1905.

F. H. MILLER.
TELEGRAPHIC SOUNDER.
APPLICATION FILED FEB. 18, 1905.

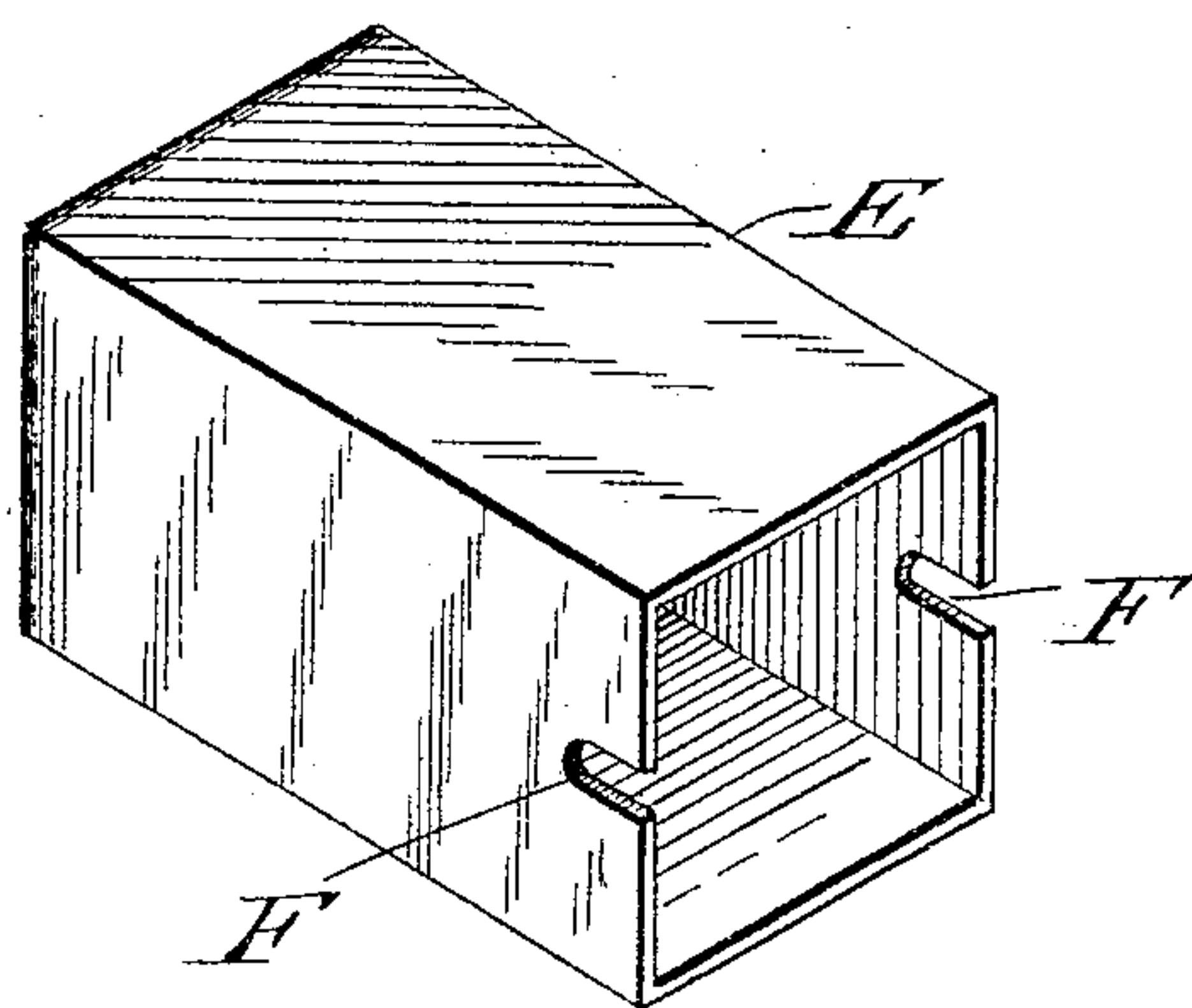
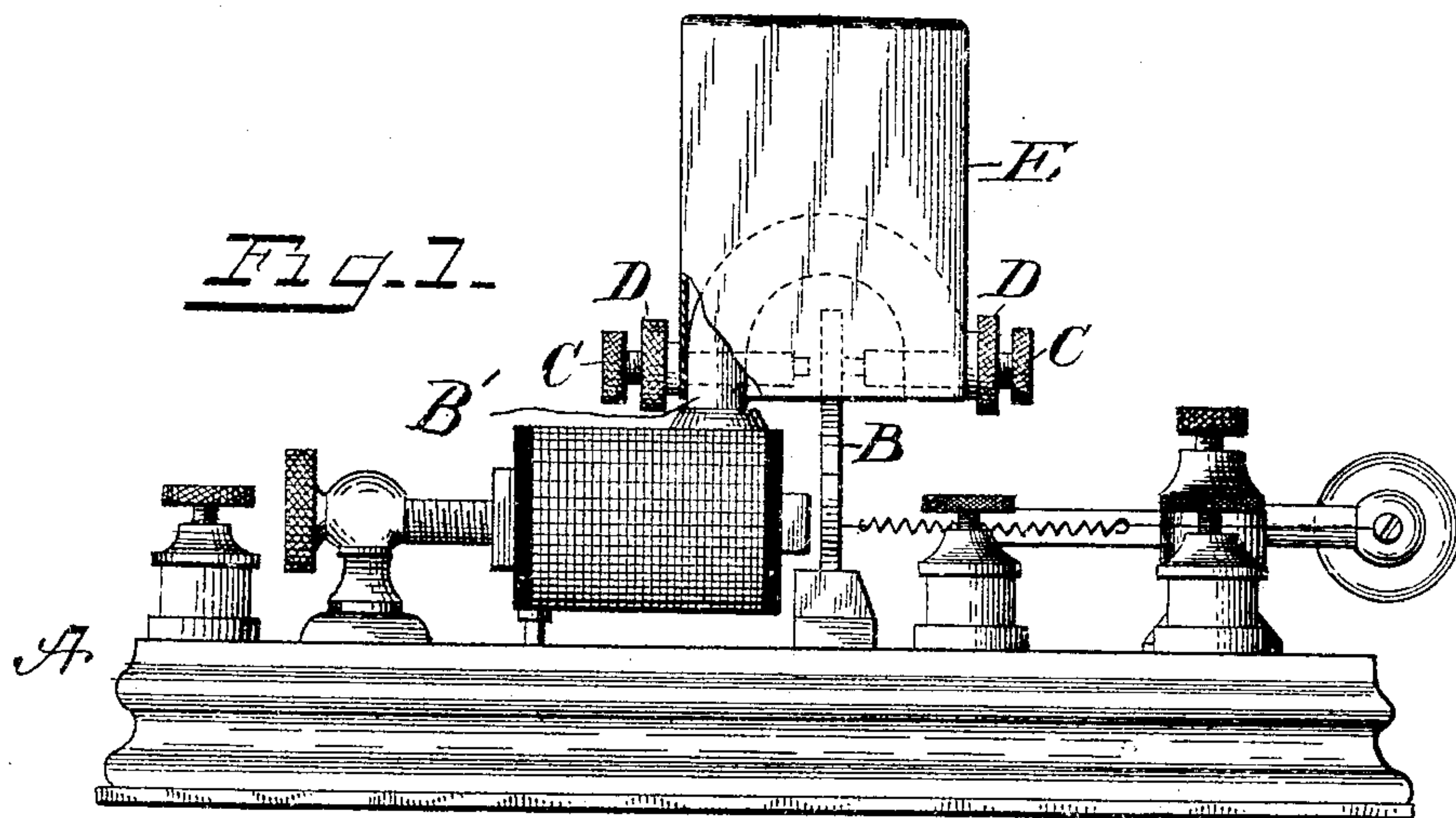


Fig. 2.

WITNESSES:
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UNITED STATES PATENT OFFICE.

FRANK H. MILLER, OF WASHINGTON, DISTRICT OF COLUMBIA.

TELEGRAPHIC SOUNDER.

No. 803,704.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed February 18, 1905. Serial No. 246,203.

To all whom it may concern:

Be it known that I, FRANK H. MILLER, a citizen of the United States of America, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Telegraphic Sounders, of which the following is a specification.

This invention relates to telegraph instruments, and particularly to a device designed for use in augmenting the sound produced by the impact of the armature, the invention being designed particularly for use on relays of the type now in general use.

An object of this invention is to provide a sounder which can be attached to an ordinary relay by utilizing agencies or devices now commonly a part of relays, thereby permitting the application of the sounder without disturbing the instrument or parts of the instrument other than the jam or set nuts usually threaded on the contact-screws and designed to abut the sounding-posts for the purpose of holding the said contact-screws in the desired position.

It is the purpose of this invention, therefore, to utilize the agencies present in the ordinary relay for so binding the sounder in contact with the ordinary sounding-posts that a maximum vibration of the sounding-posts may be communicated to the sounder attachment.

Furthermore, an object of this invention is to provide novel means for maximizing the area of contact between the sounder and the posts and to use in combination therewith the jam-nuts for binding the sounder in place.

With the foregoing and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts in the several views, in which—

Figure 1 is a view in elevation illustrating an ordinary relay with the sounder attached. Fig. 2 is a perspective view of the sounder.

In the drawings, A indicates a relay which may be of any preferred construction, and as

many parts of the relay do not enter into this invention it will not be described in detail. Suffice it to say that the sounding-post B' is provided with the usual adjustable contact-screws C to vary the effect produced by the armature B, which acts in conjunction with the said contact-screws, and, furthermore, that the jam-nuts D are threaded on the contact-screws and adapted to contact with the sounding-post to retain the contact-screws in their different positions.

The sounder E, which might be termed a "resonant box," has one end opened and forms a bell-like structure which fits over the sounding-post.

Two opposing walls of the box are notched, as shown at F, and the width of the notches is equal to the diameter of the contact-screws, and I have found in practice that it is desirable to have these notches as small as possible in order that the edges of the notches will just touch the sides of the screws, for by this arrangement the edges of the notches being in contact with the screws on three sides and the walls of the box being in contact with the sounding-post the communication of the full vibratory action of the post and screws to the walls of the box is insured.

It is my purpose to make the box of a size required to span the sounding-post or to span two sounding-posts in instruments when two such posts are employed and to cause it to lie against the outer surfaces of the said post, with the contact-screws in the notches of the walls of the box. This arrangement does not interfere with the adjustment of the screws in any way, and after the said screws are adjusted the jam-nuts are screwed up against the outer surfaces of the box. The inner surfaces of the box are thus pressed against the sounding-post by the jam-nuts, causing the jam-nuts to perform the dual function of retaining the box in place and holding the contact-screws in the desired position.

This invention is differentiated from devices in the art designed to perform similar functions by reason of the means provided for utilizing the box in conjunction with instruments now in use employing parts of the said instrument as a means for attaching the box in place. The box is constructed of rather

hard metal, and I have found that rolled brass is best adapted for use.

Having fully described my invention, what I claim as new, and desire to secure by Letters
5 Patent, is—

In combination with the sounding-post, contact-screws and jam-nuts of an ordinary relay, a sounding-box fitted over the post, having notches to receive the contact-screws, and

clamped in engagement with the post by the jam-nuts.

In testimony whereof I affix my signature, in the presence of two witnesses, this 17th day of February, 1905.

FRANK H. MILLER.

Witnesses:

FRANK S. APPLEMAN,
LOTTIE E. BARKLEY.