

No. 772,590.

PATENTED OCT. 18, 1904.

R. VARLEY.
INDUCTION COIL.

APPLICATION FILED JULY 12, 1904.

NO MODEL.

Fig. 1.

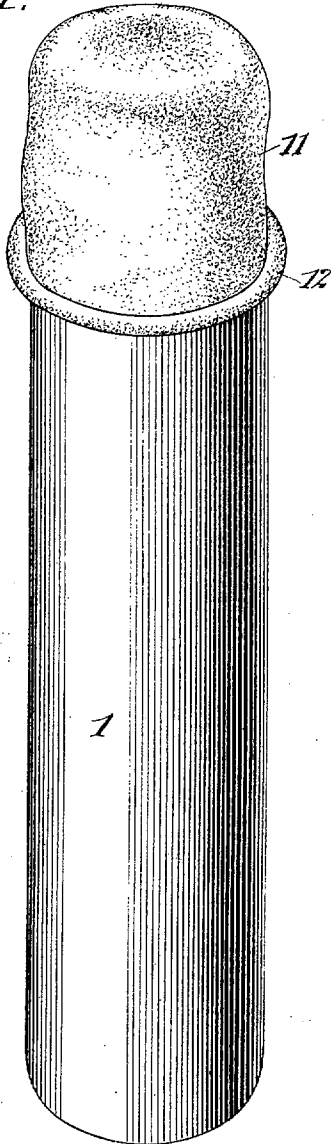
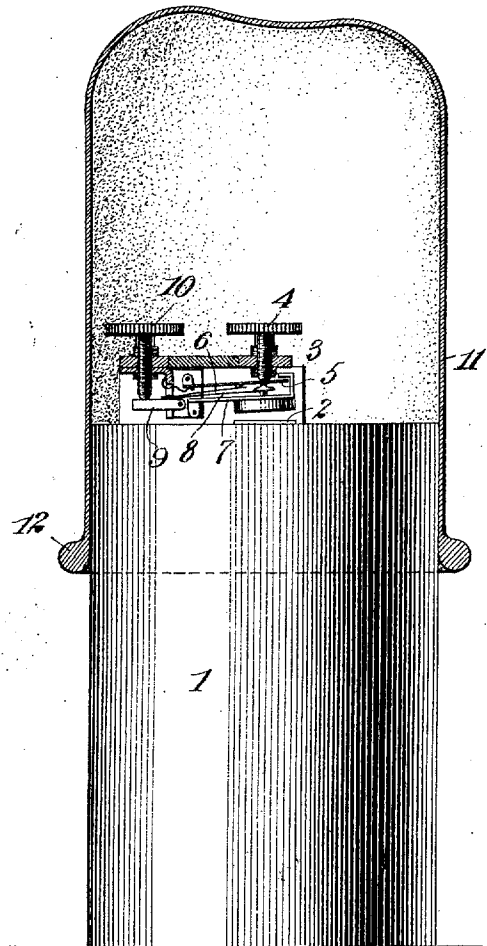


Fig. 2.



Witnesses
Paul Ober
Waldo M. Chapin

Inventor:
Richard Varley
By *his Attorneys*
Rosenbaum & Stockbridge

UNITED STATES PATENT OFFICE.

RICHARD VARLEY, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO
VARLEY DUPLEX MAGNET COMPANY, A CORPORATION OF NEW
JERSEY.

INDUCTION-COIL.

SPECIFICATION forming part of Letters Patent No. 772,590, dated October 18, 1904.

Application filed July 12, 1904. Serial No. 216,254. (No model.)

To all whom it may concern:

Be it known that I, RICHARD VARLEY, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Induction-Coils, of which the following is a full, clear, and exact description.

My invention relates to induction-coils, the object of the same being to provide means for completely inclosing the vibrator, and thereby excluding dust, moisture, and other foreign substances therefrom, which will without removal permit such adjustments of the vibrator to be made as may from time to time become necessary.

The details of the invention will hereinafter appear and the novel features thereof will be set forth in the claims.

In the drawings forming part of this specification, Figure 1 is a perspective view illustrative of my invention, and Fig. 2 is a sectional elevation of the same.

Within the casing 1, which has been shown as cylindrical in form, but which may be of any other suitable shape, is inclosed the induction-coil, the core of which is shown at 2, projecting from one end thereof. The vibrator 3 is of substantially the same construction as that disclosed in my Patent No. 748,442, dated December 29, 1903, and requires no detail description. So far as the present invention is concerned any other suitable form of vibrator may be substituted for that shown. It may be stated, however, that the circuit through the primary of the induction-coil includes the adjusting-screw 4 and the contact-plate 5, the latter being normally urged into engagement with the lower end of the screw 4 by the spring 6. The pivoted armature-lever 7 is acted upon by the spring 8 and both the springs 6 and 8 are connected to the lever 9. The tension of both of said springs may be adjusted by means of the screw 10, whose lower end bears against the lever 9. The vibrator 3 is completely inclosed by a cover 11 in the form of a hood or thimble which embraces the end of the casing

1. The said cover is constructed of flexible insulating material, preferably rubber, and has a bead or enlargement 12 around its lower edge. To apply the same, the open end of said cover is slipped over the upper end of said casing and the same is retained in place by friction. To permit of this, however, it is important, if not necessary, that the said cover be also elastic. When once in place, it is not necessary to remove said cover in order to make adjustments of the vibrator. Access may be had to both the adjusting-screws 4 and 10 by merely compressing the flexible walls of the cover, so that said screws may be grasped by the fingers and turned in one direction or the other. When the cover is in place, it is impossible for any dust, moisture, or other foreign substance to come in contact with the working parts of the vibrator and it is unnecessary to remove said cover when it is desired merely to make those adjustments which frequently become necessary.

Having now described my invention, what I claim is—

1. The combination with the casing and vibrator of an induction-coil, of a flexible cover fitting upon said casing and completely inclosing said vibrator.

2. The combination with the casing and vibrator of an induction-coil and the adjusting-screws for said vibrator, of a flexible elastic hood fitting upon said casing and completely inclosing said vibrator and screws.

3. The combination with the casing of an induction-coil and the vibrator with its adjusting-screws projecting from one end thereof, of a flexible rubber hood or thimble completely inclosing said vibrator and screws, and having a bead around its edge which fits around and frictionally engages the walls of said casing.

In witness whereof I subscribe my signature in the presence of two witnesses.

RICHARD VARLEY.

Witnesses:

WM. M. STOCKBRIDGE,
E. L. BOWERS.