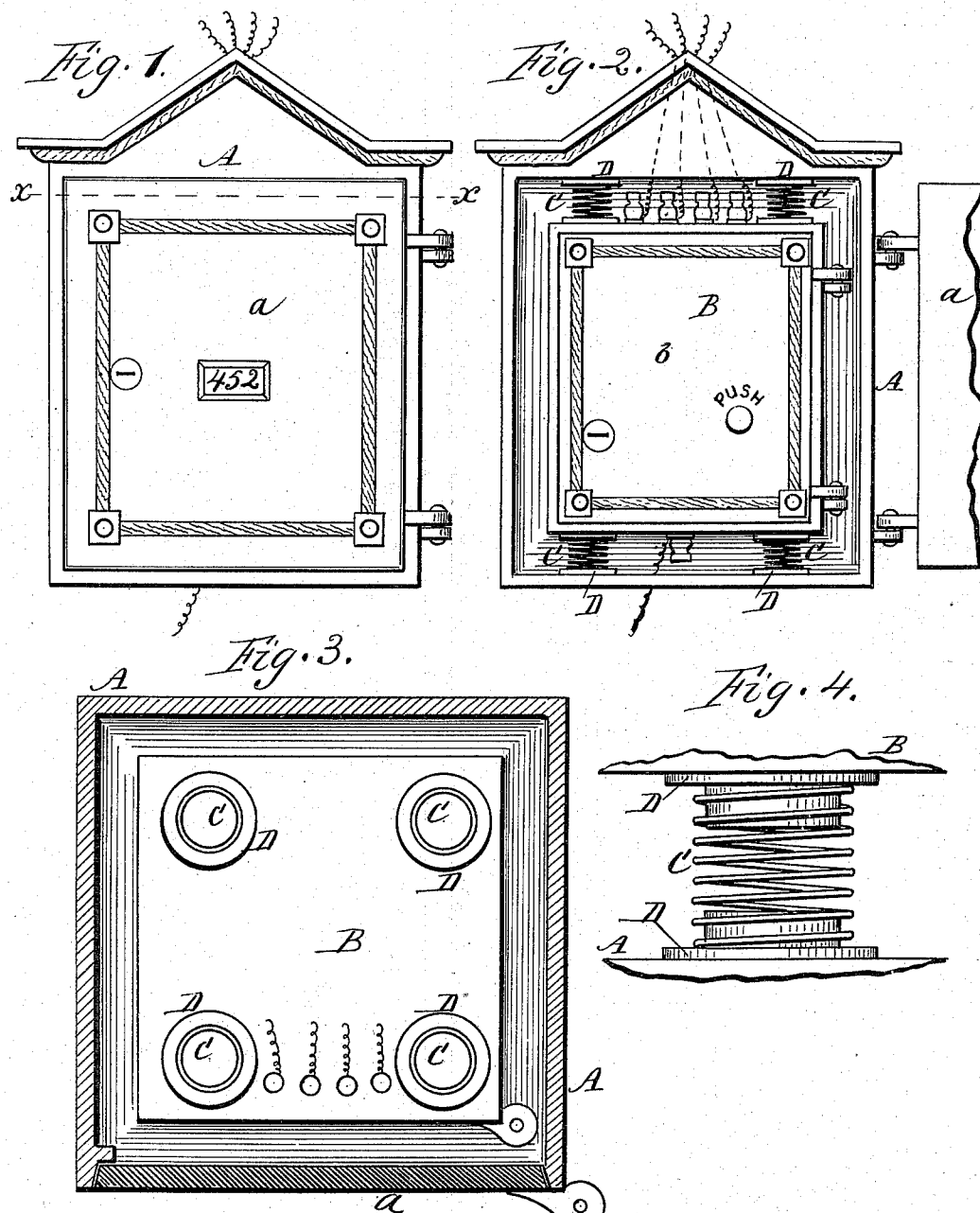


(No Model.)

W. W. HIBBARD.
ELECTRIC SIGNAL BOX.

No. 571,441.

Patented Nov. 17, 1896.



Witnesses:

Chas. E. Widener,
J. J. Culver

Wm. W. Hubbard, Inventor.
per R. L. Osgood,
Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM W. HIBBARD, OF ROCHESTER, NEW YORK, ASSIGNOR TO THE
STANDARD ELECTRIC SIGNAL COMPANY, OF SAME PLACE.

ELECTRIC SIGNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 571,441, dated November 17, 1896.

Application filed June 16, 1894. Serial No. 514,823. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. HIBBARD, of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Electric Signal-Boxes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings accompanying this application.

My improvement relates to that class where one box rests inside another and is insulated therefrom; and the invention consists in the construction and arrangement hereinafter described and claimed.

In the drawings, Figure 1 is an elevation showing the box closed. Fig. 2 is a similar view showing the door of the outer box thrown open and exhibiting the inner box with its door closed. Fig. 3 is an enlarged horizontal section in line *x x* of Fig. 1. Fig. 4 is an enlarged elevation of one of the springs and its insulators located between the two boxes.

A indicates the exterior box and B the interior one. The exterior box is of ordinary form and is provided with a door *a*. It is attached as a fixture in some permanent place. The interior box is provided with a door *b*, and it is so much smaller than the exterior one as to leave a clear space all around. It is supported in the central position by four or more springs C C C C at top and bottom, which rest in contact with rubber or other insulators D D D D. The drawings show insulators at both ends of the springs, but they are essential at only one end. Each of these insulators consists of a flat disk, which receives the contact of the spring, and a projecting nipple entering the body of the spring, as shown in Fig. 4. By this means the spring is entirely insulated and is sustained in place

by the insulator itself. The electrical attachments inside the inner case may be any of the known kinds.

By the construction above described the inner box, which holds the electrical apparatus, is covered and shielded from harm and is at the same time so attached as to have free movement independent of the outer box. Being insulated from the exterior box, the electrical fixtures can be attached to it without insulation. In ordinary boxes consisting of a single case they have to be insulated. All shocks and concussions are expended on the outer box without affecting the inner one. In ordinary boxes consisting of a single case such shocks and concussions are liable to disarrange the electrical parts.

Having described my invention, I disclaim two boxes, one inside the other, the inner one held by springs.

What I claim as new, and desire to secure by Letters Patent, is—

In a signal-box, the combination, with the two boxes set one within the other and separated by a clear space, of four spiral springs at the corners connecting the boxes and sustaining the interior one, and insulators around which the springs rest, said insulators constructed with cores that enter the hollow of the springs and end flanges that prevents contact of the springs with the boxes, as herein shown and described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

W. W. HIBBARD.

Witnesses:

R. F. OSGOOD,
CHAS. A. WIDENER.