

(No Model.)

2 Sheets—Sheet 1.

G. W. WILSON.

HINGE CONNECTION FOR ELECTRICAL INSTRUMENTS.

No. 352,596.

Patented Nov. 16, 1886.

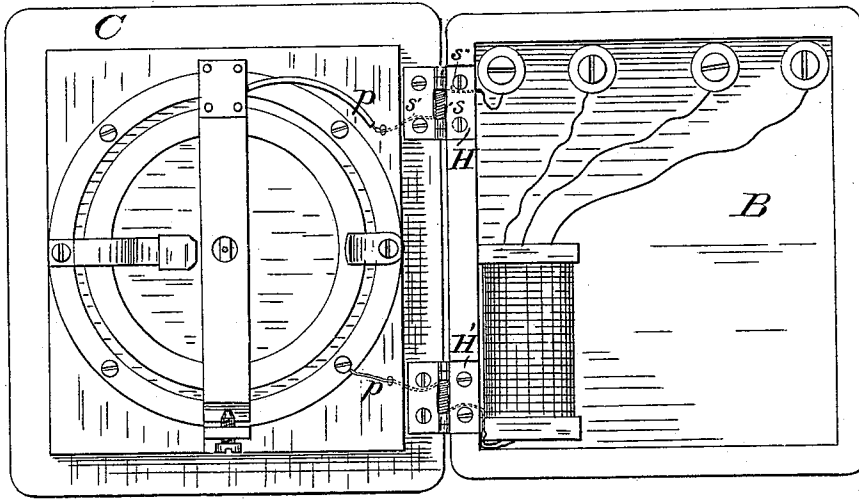
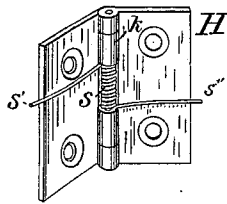


Fig. 1.

Fig. 2.



Witnesses.

Geo. Willis Pierce
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Inventor:

Geo. W. Wilson

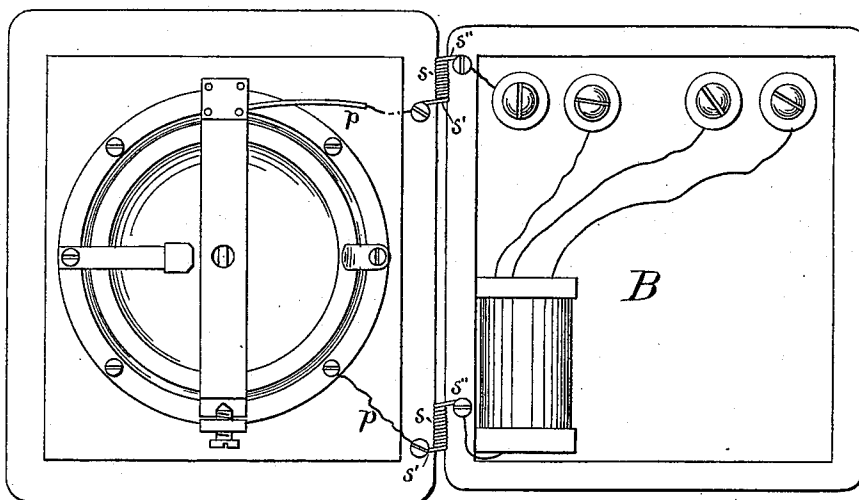
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Fig. 3.



Witnesses.

Philip Mauro.

C. J. Hedrick

Inventor,

George W. Wilson
by A. Pollak
his attorney.

UNITED STATES PATENT OFFICE.

GEORGE W. WILSON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE
AMERICAN BELL TELEPHONE COMPANY, OF SAME PLACE.

HINGE-CONNECTION FOR ELECTRICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 352,596, dated November 16, 1886.

Application filed June 26, 1884. Serial No. 136,083. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. WILSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Hinge-Connections for Inclosing-Cases of Electrical Instruments, of which the following is a specification.

The object of my invention is to improve the circuit-connections in battery-transmitters, magneto-bells, and similar electrical instruments having a case or cover whereon a portion of the operative parts are located.

Heretofore in instruments wherein it is necessary to carry a circuit-connection from the main portion of the case to some point placed on the cover or door the hinges have been used to form part of the circuit, and to render such connection more reliable a flat spring has been pivoted to the surface of one leaf of the butt or hinge, its free end projecting slightly to engage with the second leaf of the butt or hinge when the door or cover to which the hinge is attached is closed. This spring, however, only aids in forming the circuit connected through the hinge when said hinge is closed.

My invention consists of a wire of some resilience, placed at the junction of the cover and the case of which it forms a part. The wire or spring so located is included in the electrical circuit extending to the cover, and, whether the cover be open or closed, preserves the electrical connection unimpaired. In the practical application of my device I place the spiral wire or spring upon the pin joining the two leaves of that form of hinge in common use. The spiral wire or spring may, however, be formed from material of sufficient strength to entirely replace the present form of hinge and perform the functions of both.

In the accompanying drawings, Figure 1 shows my device applied to a battery-transmitter. Fig. 2 is an enlarged view of a leaf-hinge to which my device is applied, and Fig. 3 is a view of a transmitter in which the spiral wire constitutes the hinge as well as the circuit-connection.

B is a battery-transmitter. Its cover C is connected thereto by leaf-hinges H H', and is shown wide open.

A wire, *s*, is formed into a spiral. Its ends, extending in opposite directions, are securely fixed, one end, *s''*, to the case, and the other, *s'*, to the cover. In the form of battery-transmitter shown the primary circuit *p* extends from the induction-coil located upon the door or cover, and the spiral wires *s s* are included in this circuit. The spiral wire is conveniently applied to the common form of hinge H by removing one of the knuckles, like *k*, placing the spiral wire in its place, and passing the pin which joins the two leaves through the spiral. The ends of the wire may be placed under the leaves of the spring, as at *s s'* in Fig. 1, and the leaves screwed down upon such ends, or the ends may be placed in front of the leaves, as in Fig. 2. By the first construction the spiral wire is of service in strengthening the hinge. In the second form it may be more readily substituted when broken. A spiral wire constructed, as shown in Fig. 3, from material of sufficient strength is advantageously substituted for the present form of hinge, and performs both the functions of a hinge and circuit-connection.

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

1. In an inclosing-case for electrical instruments, a spiral wire constituting the hinge or part of the hinge, and also a circuit-connection between the separable or movable parts of said case, substantially as described.

2. In a case for electrical instruments, a hinge composed of a spiral wire and forming part of an electric circuit, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 24th day of June, 1884.

GEO. W. WILSON.

Witnesses:

WM. B. VANSIZE,
GEO. WILLIS PIERCE.