

G. W. HART.
 MEANS FOR SECURING CONDUCTOR TERMINALS.
 APPLICATION FILED MAY 20, 1912.

1,046,067.

Patented Dec. 3, 1912.

Fig. 1.

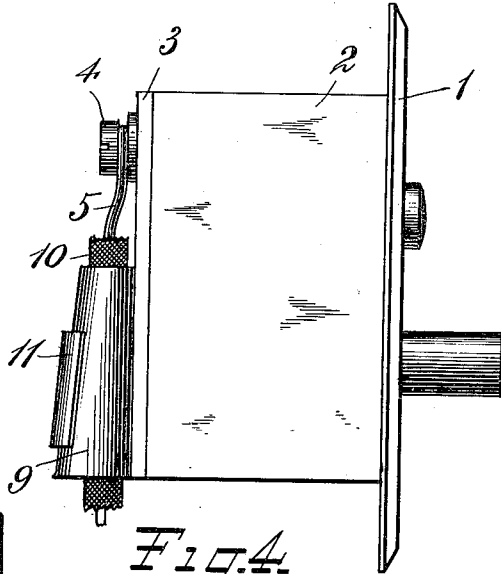


Fig. 2.

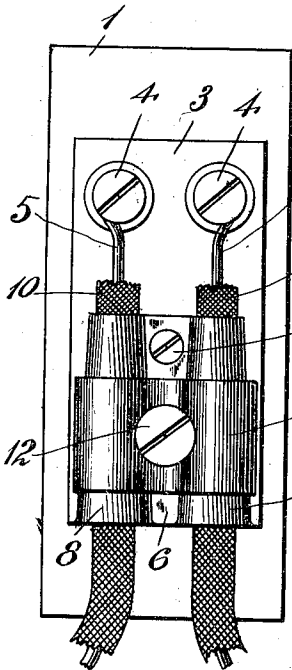


Fig. 4.

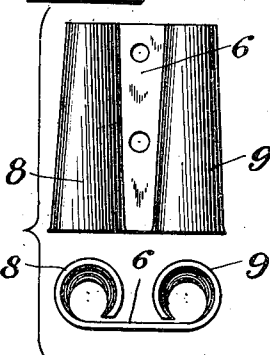


Fig. 5.

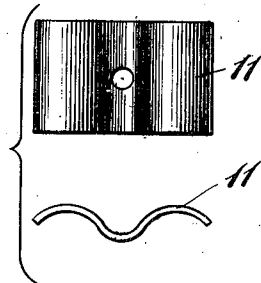
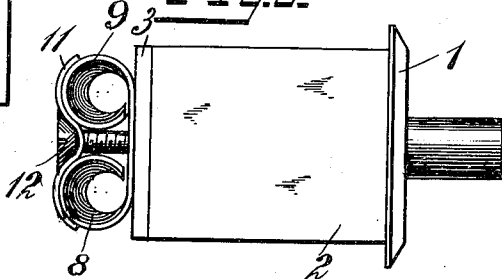


Fig. 3.



Witnesses:
 Fred S. M. Rosenfelder
 Chas. A. Eard

Inventor
 G. W. HART
 By Attorney
 Marshall M. Mawell

UNITED STATES PATENT OFFICE.

GERALD W. HART, OF WEST HARTFORD, CONNECTICUT, ASSIGNOR TO THE HART MANUFACTURING COMPANY, OF HARTFORD, CONNECTICUT, A CORPORATION OF NEW JERSEY.

MEANS FOR SECURING CONDUCTOR-TERMINALS.

1,046,067.

Specification of Letters Patent.

Patented Dec. 3, 1912.

Application filed May 20, 1912. Serial No. 698,463.

To all whom it may concern:

Be it known that I, GERALD W. HART, a citizen of the United States, residing at West Hartford, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Means for Securing Conductor-Terminals, of which the following is a full, clear, and exact description.

My invention relates to means for securing conductor terminals, and has for its object to provide a means whereby the vibration of the conductor is distributed so as to be largely removed from the immediate proximity of the binding post.

In certain relations, particularly in connection with switches upon automobiles, the conductors are subjected to an intense and long continued vibration. If this vibration is not prevented, and is not distributed, its effect is so pronounced in close proximity to the binding post that the conductor crystallizes and in time breaks at that point.

The object of my invention is to provide a means for distributing this vibration so as to largely prevent it in close proximity to the binding post, which means is simple and convenient and permits the use of insulated wires of various sizes.

The following is a description of an embodiment of my invention, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of a switch, having my improved means. Fig. 2 is a rear elevation of the same. Fig. 3 is an end elevation of the same, with the conductors omitted. Fig. 4 shows a plan and end view of the spring clip used in embodying my invention. Fig. 5 is a plan and end view of a clamp used in said spring clip.

Referring more particularly to the drawings, 1 is the face plate of a push button switch, 2 is its casing, 3 is the base carrying binding posts 4 to which the conductors 5—5 of the circuit to be controlled are connected.

Heretofore considerable annoyance and inconvenience has been experienced due to the crystallization and breaking of the conductors 5 adjacent to the binding posts 4, on account of the vibration of the conductors when the switch has been used upon automobiles, or in other relations where the con-

ductors are subject to continuous vibration. In order to distribute this vibration, I have provided a convolute spring clip 6, shown in detail in Fig. 4, which is secured to the face plate 3 by a screw 7. This spring clip is bent up from a single piece of metal so as to have two spring sockets 8 and 9, which taper so as to be smaller at the ends adjacent to the binding posts 4. The conductors 5 are inserted through these spring sockets and then are respectively clamped beneath the heads of the screws of the binding posts 4. The internal diameter of the smaller ends of the sockets 8 and 9 is sufficiently small to closely grip the insulation 10 upon any conductor which would be likely to be used in making the circuit. If the insulation 10 is larger than may be deemed necessary by some, the conductor can nevertheless be forced through the tapered sockets 8 and 9, the sockets yielding as the conductor is pressed in through from the larger ends. The clip 6 with its sockets 8 and 9 gripping the conductors will prevent, to a large extent, the vibration of the conductor adjacent to the binding posts 4, and distribute it through a considerable length. If it is desired to have the sockets 8 and 9 grip the conductors very firmly so as to hold them more securely in place, an additional clamp 11 may be applied, this clamp being held in position by a screw 12 passing through another hole in the clip 6 and entering the face plate 3. This clamp 11 when forced downward by the screw 12 causes the sockets 8 and 9 to contract so that the smaller ends of the sockets grip the respective conductors very firmly.

As will be evident to those skilled in the art, the invention permits of modification without departing from the spirit thereof and the scope of the appended claims.

What I claim is:

1. In a means for securing insulated circuit conductors, the combination of a binding post and a yielding socket having its axis in line with said binding post.

2. In a means for securing insulated circuit conductors, the combination of a spring clip and a binding post in line with said clip, said clip tapering in the direction toward said binding post.

3. In a means for securing insulated conductors, the combination of two binding

posts, a convoluted spring member having two sockets whose axes are in line with said binding posts respectively.

5 4. In a means for securing insulated conductors, the combination of two binding posts, a convoluted spring member having two sockets whose axes are in line with said binding posts respectively, said sockets
10 tapering in the direction toward said binding posts.

5. In a means for securing insulated con-

ductors, the combination of two binding posts, a convoluted spring member having two sockets whose axes are in line with said binding posts respectively, said sockets 15 tapering in the direction toward said binding posts, and a clamp engaging and contracting both of said sockets.

GERALD W. HART.

Witnesses:

H. A. HART,
EDWARD TAYLOR.