J. H. MORLEY.

SWIVELING ATTACHMENT DEVICE FOR ELECTRICAL APPARATUS.

APPLICATION FILED JUNE 26, 1909.

972,209. Patented Oct. 11, 1910.

2 SHEETS—SHEET 1.

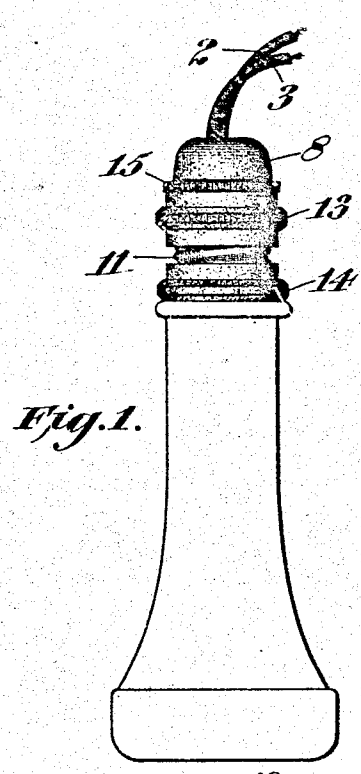
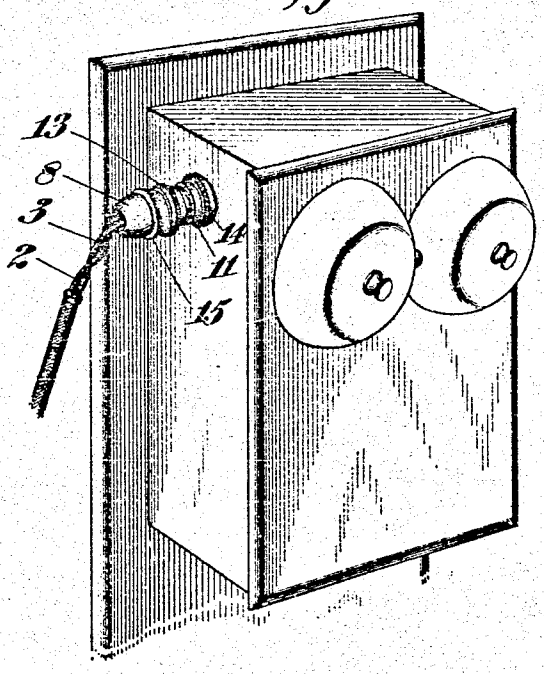


Fig. 1.

Fig. 2.



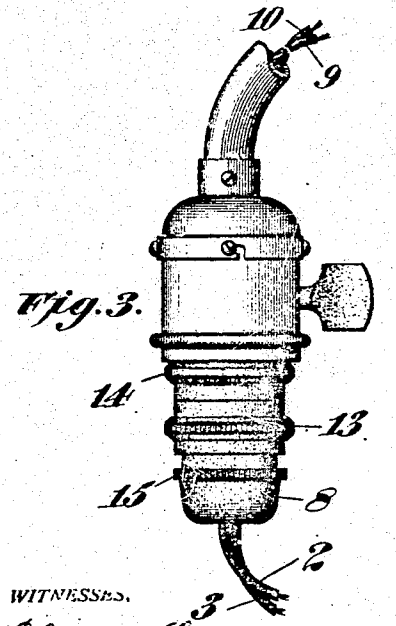
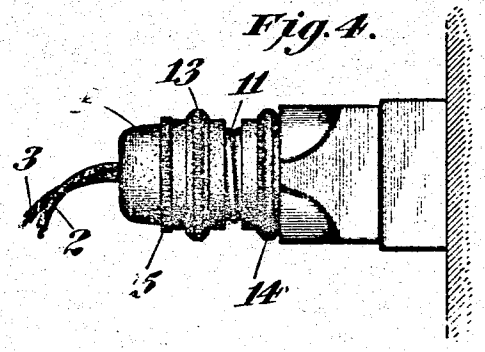


Fig. 3.

Fig. 4.



WITNESSES.

Elmer Seavey

Wm. J. Fitzmaurice, Jr

John H. Morley INVENTOR.

by Geo. E. Thackray

ATTORNEY.

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2 SHEETS—SHEET 2.

Fig. 5.

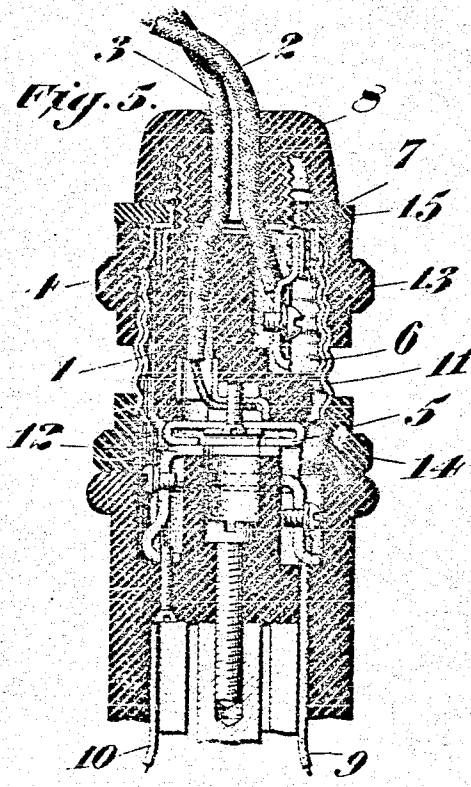


Fig. 6.

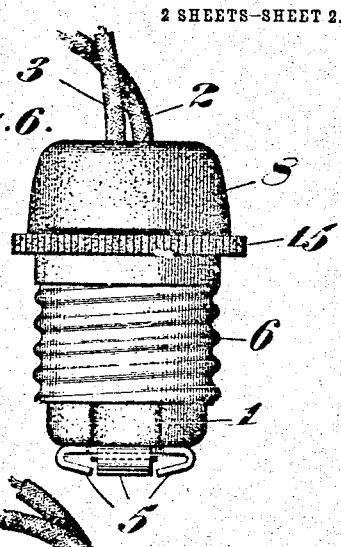


Fig. 8.

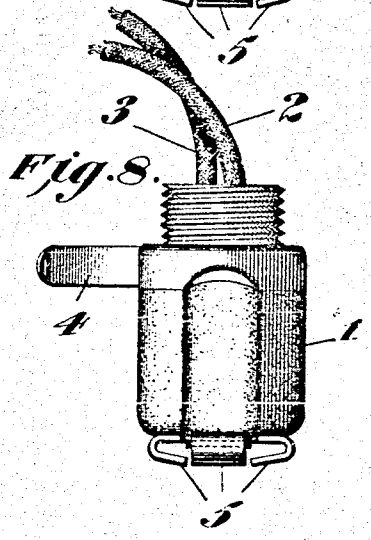


Fig. 7.

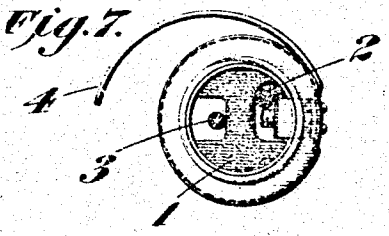


Fig. 10.

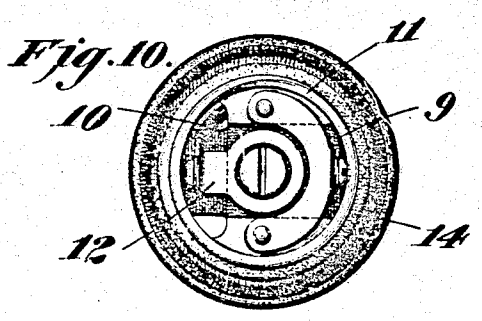
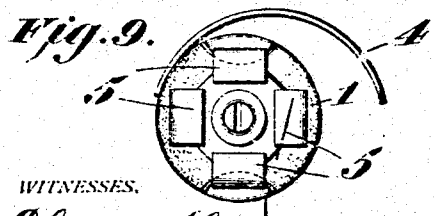


Fig. 9.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN H. MORLEY, OF JOHNSTOWN, PENNSYLVANIA.

SWIVELING ATTACHMENT DEVICE FOR ELECTRICAL APPARATUS.

972,209. Specification of Letters Patent. Patented Oct. 11, 1910.

Application filed June 26, 1909. Serial No. 504,439.

To all whom it may concern:

Be it known that I, JOHN H. MORLEY, a citizen of the United States, residing in the city of Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Swiveling Attachment Devices for Electrical Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to swiveling attachments for electrical apparatus and is particularly adapted for use in connection with telephone receivers or suspended incandescent lamps. Its object is to provide an attaching device which will be capable of rotation about its axis and still maintain a good electrical contact.

My improved device is constructed so that it may be attached or detached without twisting the wires and it also prevents the twisting of the wires during use.

Referring to the two sheets of drawings accompanying this specification, in which like characters of reference indicate like parts throughout the views: Figures 1, 2, 3 and 4 illustrate my device fully and partially assembled and some of the uses to which it may be put. Fig. 1 is a front elevation of a telephone receiver embodying my invention. Fig. 2 is a perspective view showing my device applied to the bell-box of a telephone. Fig. 3 is a side elevation of a lamp-socket with my device in place but not yet secured against loosening. Fig. 4 is a side elevation of a wall tap with my device in position. Fig. 5 is a vertical cross-section through the upper part of the receiver and device shown in Fig. 1. Fig. 6 shows the removable part of my device assembled ready for insertion in the body part. Fig. 7 is a top plan of the swiveling part of the device; Fig. 8 is a front elevation; and Fig. 9 a view of the bottom of the same. Fig. 10 is a top plan view of the body part of the device.

Referring now to the drawings in detail, the plug 1, which is preferably of porcelain or other insulating material, is shown as carrying the branch wires 2 and 3, the wire 2 being connected to the arcuate metallic spring 4 and the wire 3 to the U-shaped metallic spring 5 of which there may be one or more. The threaded metallic sleeve 6 fits loosely over the plug and contacts with the arcuate spring 4. As is best shown in Fig. 5, the upper part of the sleeve 6 is formed into a shoulder 7 which prevents the sleeve from slipping off the plug but permits it to turn easily. The cap 8 is screwed to the upper part of the plug and holds the plug and sleeve together when detached from the body part.

The body part of the device, to which the wires 9 and 10 from the source of current are attached, consists of the threaded sleeve 11 and the center contact 12. The wire 9 is connected to the sleeve 11 and the wire 10 to the member 12. The jam-nut 13 is mounted on the sleeve 11 and is used to hold the sleeve 6 in place so that the plug may be rotated without loosening the other parts of the device. The nut 14, also mounted on the sleeve 11, secures the device to the telephone receiver or other object to which it is applied.

To insert the plug 1 in the body part, the wires 2 and 3 are held stationary and the sleeve 6 is rotated until the spring 5 is forced against the center contact 12. This stage of the operation is shown in Fig. 3. The nut 13 is then screwed tightly against the collar 15 on the sleeve 6, thus preventing the sleeve from becoming loose by turning, although the plug and its attached wires may be turned easily.

Although I have shown and described my improvements in considerable detail, I do not wish to be limited to the exact and specific details shown and described, but may use such substitutions, modifications or equivalents thereof, as are embraced within the scope of my invention, or as pointed out in the claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. An attachment device comprising a body portion carrying one set of wires, a plug carrying another set of wires, said plug being inserted within the body portion and connected thereto by means of a spring on said plug, a sleeve insulated from said spring and loosely surrounding the sides of the plug to permit rotation, said sleeve being in contact with the body portion and a spring connecting the sleeve to one of the terminals.

2. An attachment device comprising a terminal-carrying plug, said terminals con-

sisting of an arcuate spring at the side and one or more U-shaped springs at the end of the plug, a metallic sleeve abutting the other end and loosely surrounding the sides of the plug and contacting with the side terminal, and a body portion consisting of a metallic sleeve electrically connected to one feed wire and contacting with the sleeve surrounding the plug, and a member electrically connected to the other feed wire and contacting with the end terminal on the plug.

3. An attachment device comprising a terminal-carrying plug, said terminals consisting of an arcuate spring at the side and one or more U-shaped springs at the end of the plug, a threaded metallic sleeve abutting the other end and loosely surrounding the sides of the plug to permit rotation, said sleeve contacting with the side terminal, and a body portion consisting of a threaded metallic sleeve electrically connected to one feed wire and a member electrically connected to the other feed wire, said member being in contact with the end terminal on the plug and the threaded sleeve surrounding the plug being engaged by the threaded sleeve on the body portion.

4. An attachment device comprising a terminal-carrying plug, said terminals consisting of an arcuate spring at the side and one or more U-shaped springs at the end of the plug, a threaded metallic sleeve loosely secured to the plug to permit rotation, said sleeve contacting with the side terminal, a body portion consisting of a threaded metallic sleeve electrically connected to one feed wire and a member electrically connected to the other feed wire, said member being in contact with the end terminal on the plug and the threaded sleeve on the plug being engaged by the threaded sleeve on the body portion, and means for preventing relative motion between the two sleeves.

5. An attachment device comprising a terminal-carrying plug, said terminals consisting of an arcuate spring at the side and one or more U-shaped springs at one end of the plug, a threaded metallic sleeve loosely secured to the plug to permit rotation, said sleeve contacting with the side terminal, a body portion consisting of a threaded metallic sleeve electrically connected to one feed wire and a member electrically connected to the other feed wire, said member being in contact with the end terminal on the plug and the threaded sleeve on the plug being engaged by the threaded sleeve on the body portion, and a jam-nut for locking the sleeves in position.

6. A swiveling electrical connection comprising a terminal-carrying plug, the terminals consisting of an arcuate spring at the side of the plug and one or more U-shaped springs at the end of said plug, a metallic sleeve abutting the other end and loosely surrounding the sides of the plug and contacting with the side terminal.

7. An electrical swiveling connection comprising a terminal-carrying plug, one of said terminals consisting of an arcuate spring at the side of said plug, the other terminal consisting of one or more U-shaped springs at the end of said plug, a threaded metallic sleeve loosely surrounding the sides of said plug to permit rotation, said sleeve contacting with the side terminal aforesaid.

In testimony whereof I hereto affix my signature in the presence of two witnesses.

JOHN H. MORLEY.

Witnesses:
ELMER SEAVEY,
WM. J. FITZMAURICE, Jr.