

J. A. NICKERSON.
 Connecting Tip for Electrical Conductors.
 No. 203,931. Patented May 21, 1878.

Fig. 1.



Fig. 2.

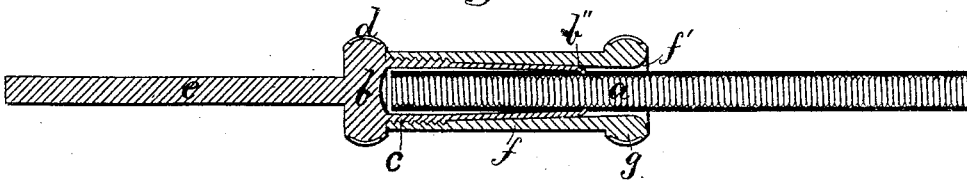
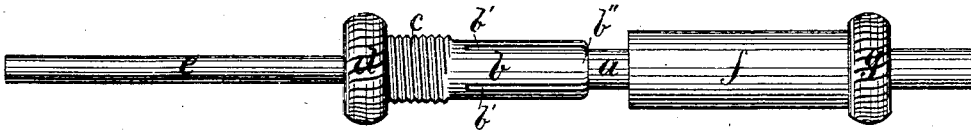


Fig. 3.



Witnesses:

Henry Chadbourne.
H. Allen.

Inventor:

Joseph A. Nickerson
 by *Alvan Andrieu.*
his atty.

UNITED STATES PATENT OFFICE.

JOSEPH A. NICKERSON, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN CONNECTING-TIPS FOR ELECTRICAL CONDUCTORS.

Specification forming part of Letters Patent No. **203,931**, dated May 21, 1878; application filed April 20, 1878.

To all whom it may concern:

Be it known that I, JOSEPH A. NICKERSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Connecting-Tips for Electrical Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in connecting-tips for electrical apparatus, for the purpose of connecting flexible or other wires used in telephones, telegraphic, or other electrical apparatus with any desired parts of such apparatus, or for the purpose of connecting two or more wires in electrical instruments or apparatus; and this my invention consists of a screw-threaded split cylindrical piece, into which the electrical wire is inserted, in combination with a screw-threaded annular tapering ferrule surrounding the screw-threaded split part, and screwed around the thread of the same, by which the split parts thereof are compressed around the wire inserted therein, by which arrangement a wire can be inserted or removed and replaced within the tip without loss of time, without the need of a skilled workman, and without the need of a new tip, as is now the case with the ordinary tips used on telephones and other electrical instruments or apparatus. The extreme end of the screw-threaded split part is provided with a projecting shank or wire, to be inserted in the usual socket or twister, or otherwise connected to any other wire or parts of a telephone or electrical apparatus or instrument, in the usual manner. The screw-threaded split part, as well as the annular tapering ferrule, are each provided with a serrated thumb-piece, by which they are held and operated by hand for the purpose of connecting them together when the wire is put in place, or for the purpose of detaching one part from the other when a new part of the wire is to be replaced for an old or damaged piece.

On the accompanying drawings, Figure 1 represents a side elevation of my improved connecting-tip with its wire secured in place ready for use. Fig. 2 represents a central longitudinal section of the same, and Fig. 3 represents a side elevation of the two parts of the tip disconnected from each other.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

a represents a flexible or other electric wire, in the usual manner. The connecting-tip is composed of the cylindrical split sleeve *b*, having one or more slits, *b' b'*, which sleeve is provided with a screw-threaded shank, *c*, and serrated head or collar *d*, terminating in the solid projection or wire *e*, as shown, and for the purpose set forth.

The extreme end *b''* of the split cylinder *b* is curved inward, as shown, so as to embrace and hold more firmly the wire *a* in its position, as shown in Fig. 2, when the annular screw-threaded tapering sleeve or part *f* is screwed around said split cylinder *b*.

g is the serrated head or collar, forming a part of the tapering sleeve *f*, as and for the purpose set forth.

The outer end *f'* of the sleeve *f* is countersunk or rounded off, as shown in Fig. 2, so as to prevent the wire from breaking in the manipulation of it.

Having thus fully described the nature and construction of my invention, I wish to secure by Letters Patent and claim—

The herein-described connecting-tip for telephones or electrical apparatus or instruments, consisting of the split sleeve *b b' b''*, having screw-threaded shank *c*, serrated head *d*, and wire or projection *e*, in combination with the annular tapering sleeve *f g*, as and for the purpose set forth.

In testimony that I claim the foregoing as my own invention I have affixed my signature in presence of two witnesses.

JOSEPH A. NICKERSON.

Witnesses:

ALBAN ANDRÉN,
F. ALLEN.