

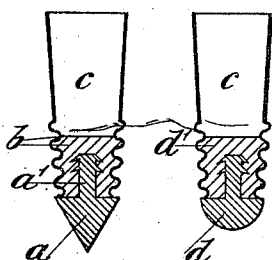
(No Model.)

L. & H. CLARKE.
TIP AND FERRULE FOR UMBRELLAS, &c.

No. 580,306.

Patented Apr. 6, 1897.

Fig. 1. Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

LEWIS CLARKE, OF PENARTH, AND HUBERT CLARKE, OF CARDIFF,
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TIP AND FERRULE FOR UMBRELLAS, &c.

SPECIFICATION forming part of Letters Patent No. 580,306, dated April 6, 1897.

Application filed November 27, 1896. Serial No. 613,629. (No model.)

To all whom it may concern:

Be it known that we, LEWIS CLARKE, a resident of Penarth, and HUBERT CLARKE, a resident of Cardiff, Kingdom of Great Britain and Ireland, subjects of the Queen of Great Britain and Ireland, have invented certain new and useful Improvements in and Relating to the Tips and Ferrules of Umbrellas or Walking-Sticks, of which the following is a specification.

Our invention relates to improvements in tips and ferrules for umbrellas or walking-sticks; and it consists in the novel devices hereinafter described and claimed.

According to this invention the tip instead of being a fixture in the ferrule is removable and can be withdrawn at will, and another can be substituted without the removal of the ferrule from the stick.

Our invention will be understood by reference to the accompanying drawings, wherein similar parts are indicated by similar letters throughout both views.

Figure 1 represents a central vertical section through a ferrule and tip made in accordance with this invention, and Fig. 2 represents a similar view showing a modified form of tip.

In Fig. 1, *a* represents a tip consisting of a steel spike, which is provided with a barbed stem *a'*, around which is molded the plug *b*, of india-rubber or other compressible and expansible material.

c represents the ferrule, which is made of any suitable hard material and corrugated at its lower end in the form of screw-threads.

The plug *b* is inserted into the corrugated portion of the ferrule by being compressed and started into the end thereof and then screwed in to its fullest extent, as shown.

After being thus inserted the material of the plug *b* will expand, and the same will be held securely within the corrugations.

The tip *a* is removed by simply unscrewing.

In Fig. 2 a rounded tip *d* and its plug *d'* are shown as substituted for the spiked tip *a* and its corresponding plug *b*.

Any other form of tip having a compressible and expansible plug secured thereto, as shown in the drawings, may be used in connection with the ferrule shown, and we do not wish to limit ourselves to the two forms of tips herein shown and described.

Having thus described our invention, what we claim, and desire to secure by Letters Patent of the United States, is—

1. The combination with a ferrule having an open end, of a plug removably inserted in the said open end and a tip having a stem secured in the said plug, substantially as described.

2. The combination with a ferrule having an open end interiorly screw-threaded, of a plug removably inserted in the said open end, and a tip having a stem secured in the said plug, substantially as described.

3. The combination with a ferrule having an open end and corrugations in the said open end; of a plug of elastic material removably inserted in the corrugated end and a tip having a stem secured in the said plug, substantially as described.

In witness whereof we have hereunto set our hands in presence of two witnesses.

LEWIS CLARKE.
HUBERT CLARKE.

Witnesses:

WM. HULIN,
A. T. ROWLAND.