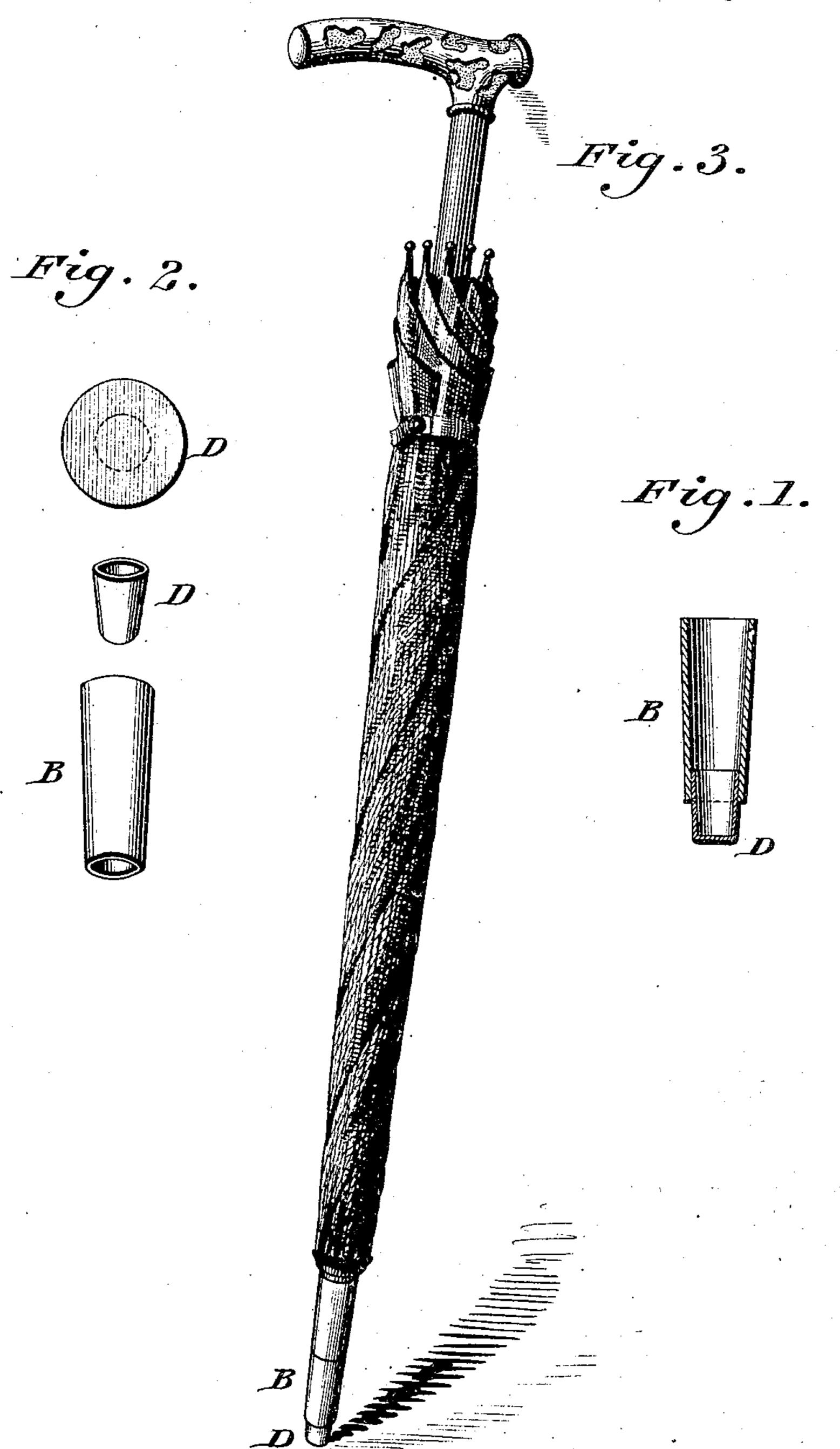
(No Model.)

C. S. SMITH.

FERRULE FOR UMBRELLAS, CANES, &c.

No. 407,375.

Patented July 23, 1889.



WITNESSES:
Per Agle.
Reese M. Fleischmann

Comby S. Smith.
by his allowy,
Khrace Fellil.

United States Patent Office.

COMLY S. SMITH, OF PHILADELPHIA, PENNSYLVANIA.

FERRULE FOR UMBRELLAS, CANES, &c.

SPECIFICATION forming part of Letters Patent No. 407,375, dated July 23, 1889.

Application filed February 5, 1889. Serial No. 298,750. (No model.)

To all whom it may concern:

Be it known that I, COMLY S. SMITH, of the city of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Ferrules for Umbrellas, Canes, Parasols, &c.; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification.

My invention has relation to that class of ferrules or tips for the ends of umbrella-sticks, canes, &c., which consist of two parts—viz., the ferrule shank or stem proper and the tip or end secured thereto. These points or tips are usually of steel or iron soldered to

the shank.

My invention is in imitation of steel-pointed ferrules; and it consists in a tip or cup struck 20 from a single plate or disk and having the outer rim of the sides of the cup of a circumference equal to or slightly greater than the inner circumference of the lower end of the ferrule-shank, as hereinafter described.

The object of my invention is to produce a so-called "steel-pointed" ferrule, which by reason of the method of construction, as hereinafter described, can be manufactured at a great saving of time, labor, and expense, and at the same time have the appearance of a ferrule having a solid steel point, and will outlast the life of an ordinary umbrella or parasol to which it is applied.

In the accompanying drawings, Figure 1 represents a cross longitudinal sectional view of my improved ferrule disconnected from the umbrella-stick or cane. Fig. 2 is a perspective view of the shank and the cup disconnected. Fig. 3 shows my improved ferrule

40 attached in position to an umbrella.

B represents the ferrule-shank.

D represents the cup or tip. The cup or tip D is struck or formed from a single disk. The outside circumference of the sides of the cup or tip D is about equal to or slightly greater than the inside circumference of the lower end of the ferrule-shank B.

The usual method of inserting the steel point or other cup or tip is to have the upper part of the tip nicely turned to tightly fit into the lower end of the ferrule-shank, and the same are then fitted together by inserting the tip at the lower end and securing it thereto.

In my invention I insert the cup or tip D !

into the ferrule-shank B from above, with the open part of the cup or tip D up. I then force the said cup or tip D to its proper position, as shown in Figs. 1 and 3, in which position it is secured by soldering in the usual 60 manner. The circumference of the sides of the cup or tip D being, as before described, slightly greater than the inside circumference of the ferrule-shank B, the cup or tip D fits tightly and firmly in the end of the fer-65 rule-shank B. When the cup or tip D is secured to the ferrule-shank B and polished or turned, it presents the appearance of a steel-pointed ferrule.

The method of dropping the cup or tip into 70 the ferrule-shank from above and forcing it down into proper position produces a great saving of time and labor over the old system of making tipped ferrules. It will be noticed that as the cup or tip D is forced 75 down through the ferrule-shank B, both B and D being usually partially conical, the sides of the cup or tip D as it approaches its position in the end of the shank B will yield, if necessary, and consequently a very tight So joint formed with but little labor in fitting. In a solid tip this could not be accomplished without nicely turning the tip to the exact desired size; and, further, my invention prevents the cup or tip from dropping out, and 85 when properly soldered cannot be forced up.

I am aware that tin-pointed ferrules have been heretofore invented—such as double-capped sheet-metal tips having a shoulder—as in steel-pointed tips, and adapted to be sequenced to the extremity of the shank of the ferrule in the same manner as such steel points are secured thereto, as before described.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, 95 is—

In a ferrule, in combination with the shank or stem B, a hollow cup or tip D, having sides adapted to yield in being forced in position from above, said cup or tip secured firmly in 100 position with end protruding from said ferrule-shank by soldering or otherwise; substantially as described.

It witness whereof I have become sot my hand this 4th day of February, A. D. 1889.

COMLY S. SMITH.

Witnesses:

W. G. GRIFFITH, HORACE PETTIT.