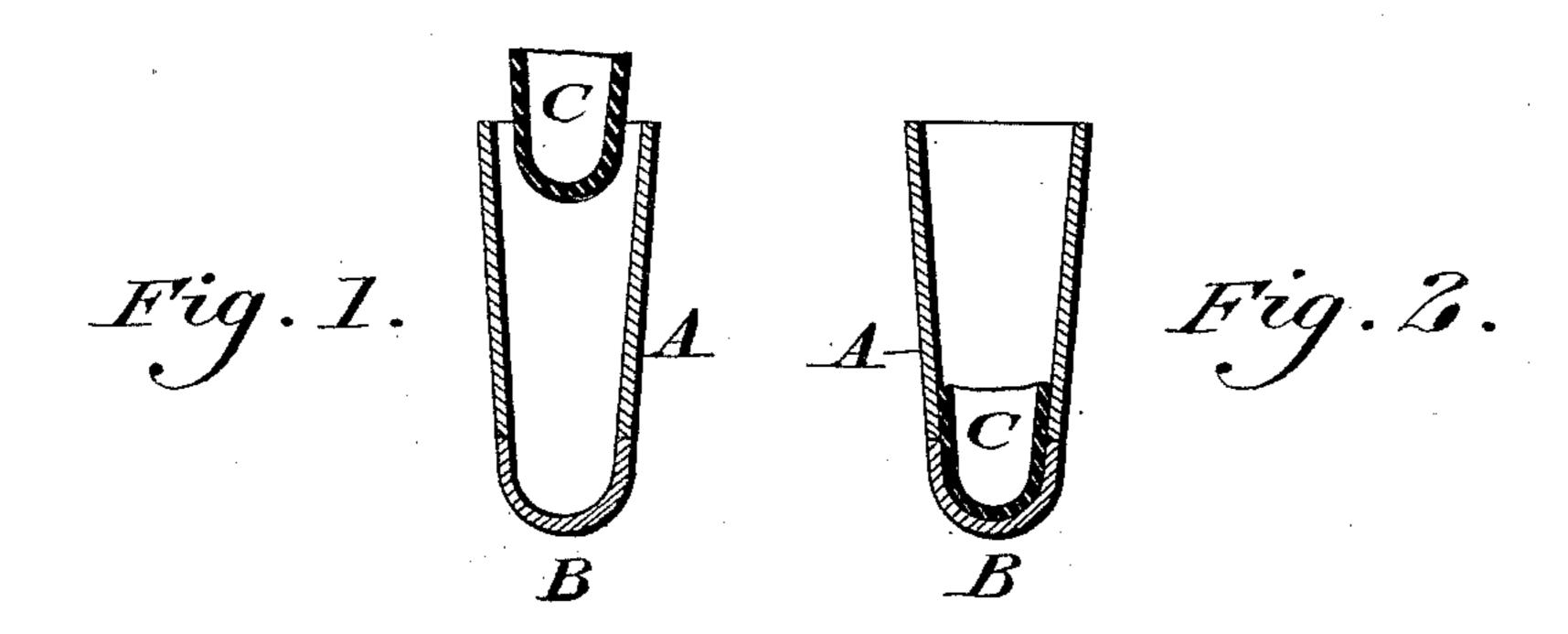
(No Model.)

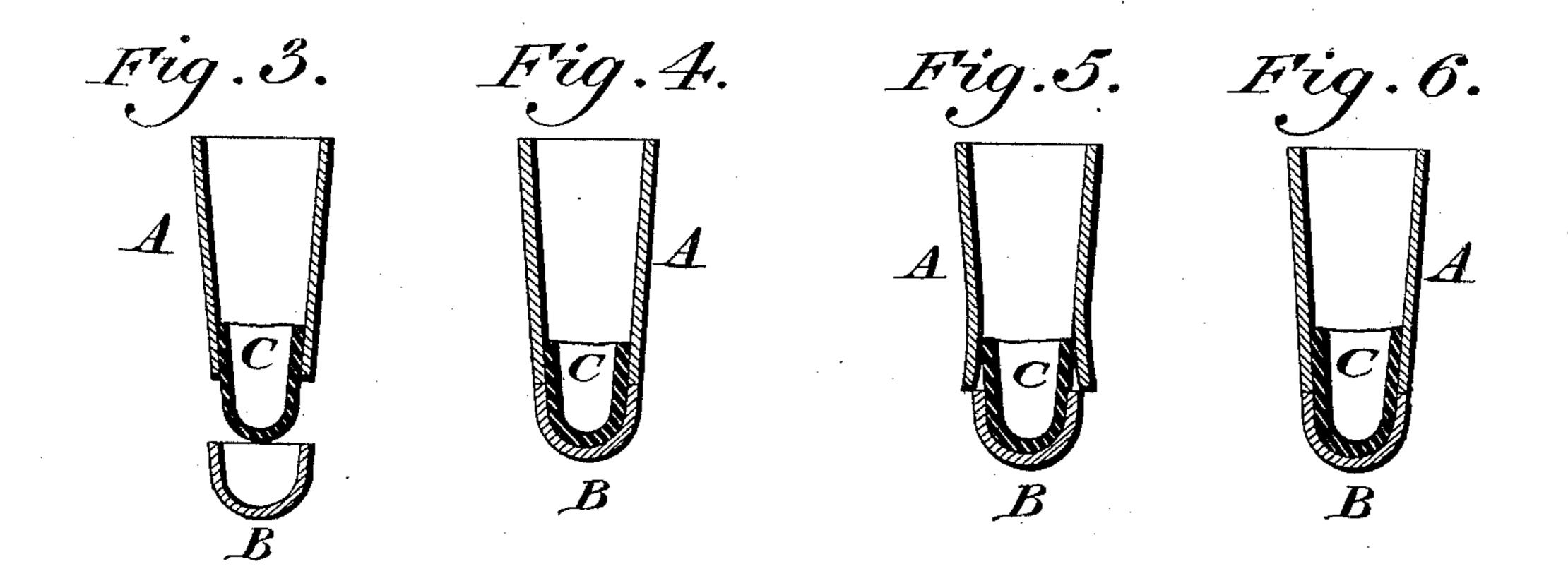
S. W. EVANS, Jr.

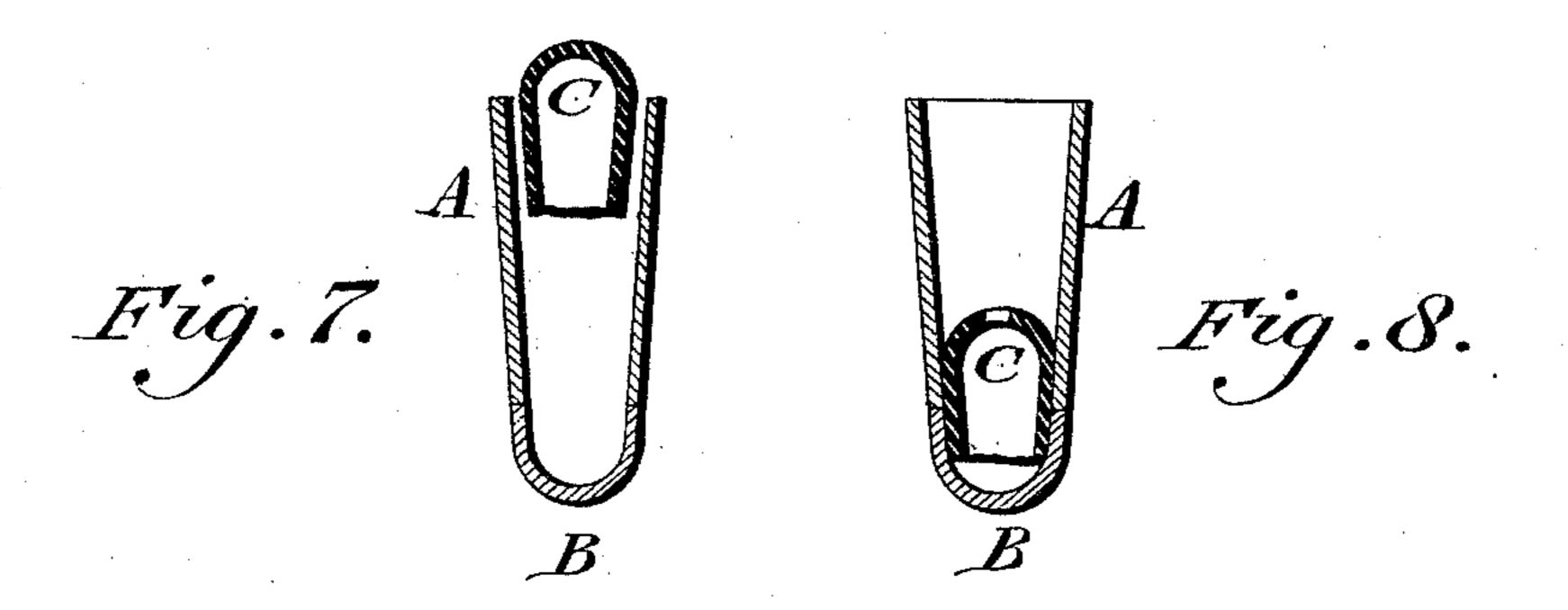
FERRULE FOR CANES, UMBRELLAS, &c.

No. 435,217.

Patented Aug. 26, 1890.







WITNESSES:

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## United States Patent Office.

SAMUEL W. EVANS, JR., OF PHILADELPHIA, PENNSYLVANIA.

## FERRULE FOR CANES, UMBRELLAS, &c.

SPECIFICATION forming part of Letters Patent No. 435,217, dated August 26, 1890.

Application filed January 6, 1890. Serial No. 335,954. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL W. EVANS, Jr., a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Ferrules for Canes, Umbrellas, &c., which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a ferrule having the point secured thereto by means of a cup on the interior thereof, as will be hereinafter fully set forth.

The figures represent forms of ferrules emto bodying my invention, and illustrate various

steps in the manufacture of the same. Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a ferrule, and B the point thereof, both being conical and formed hollow of suitable metal, constituting a continuity of each other.

C designates a cup or cup-shaped piece formed of suitable metal, which, in Figures 1 and 2, is driven into the ferrule to the base of the point, so as to be embraced by frictional contact by both the ferrule and point, thus firmly connecting said parts.

In Figs. 2 and 3 the cup is driven into the 30 ferrule and the point driven over the cup, thus locating and securing said point to the cup, and consequently to the ferrule.

In Figs. 5 and 6 the narrow end of the ferrule is primarily flaring, and the cup, with the attached point, is inserted in said end, the latter then being closed against the cup by a suitable tool or implement, thus clamping the ferrule to the cup.

In Figs. 7 and 8 I show an inverted cup, which is driven into the ferrule and point, 40 thus connecting said parts, the base of the cup, which is above, being perforated to allow air to escape when the cup is driven into position, the cups in the other cases being open at their widest ends.

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

1. A ferrule having its lower edge bearing directly against the edge of a point, and a 50 cup on the interior of said point and ferrule to connect said parts, substantially as described.

2. A hollow ferrule and a hollow point, in combination with a cup on the interior of said 55 ferrule and point connecting said parts, substantially as described.

S. W. EVANS, JR.

Witnesses:

JOHN A. WIEDERSHEIM, A. P. JENNINGS.