

(No Model.)

S. W. EVANS, Jr.
FERRULE.

No. 410,828.

Patented Sept. 10, 1889.

Fig. 1.

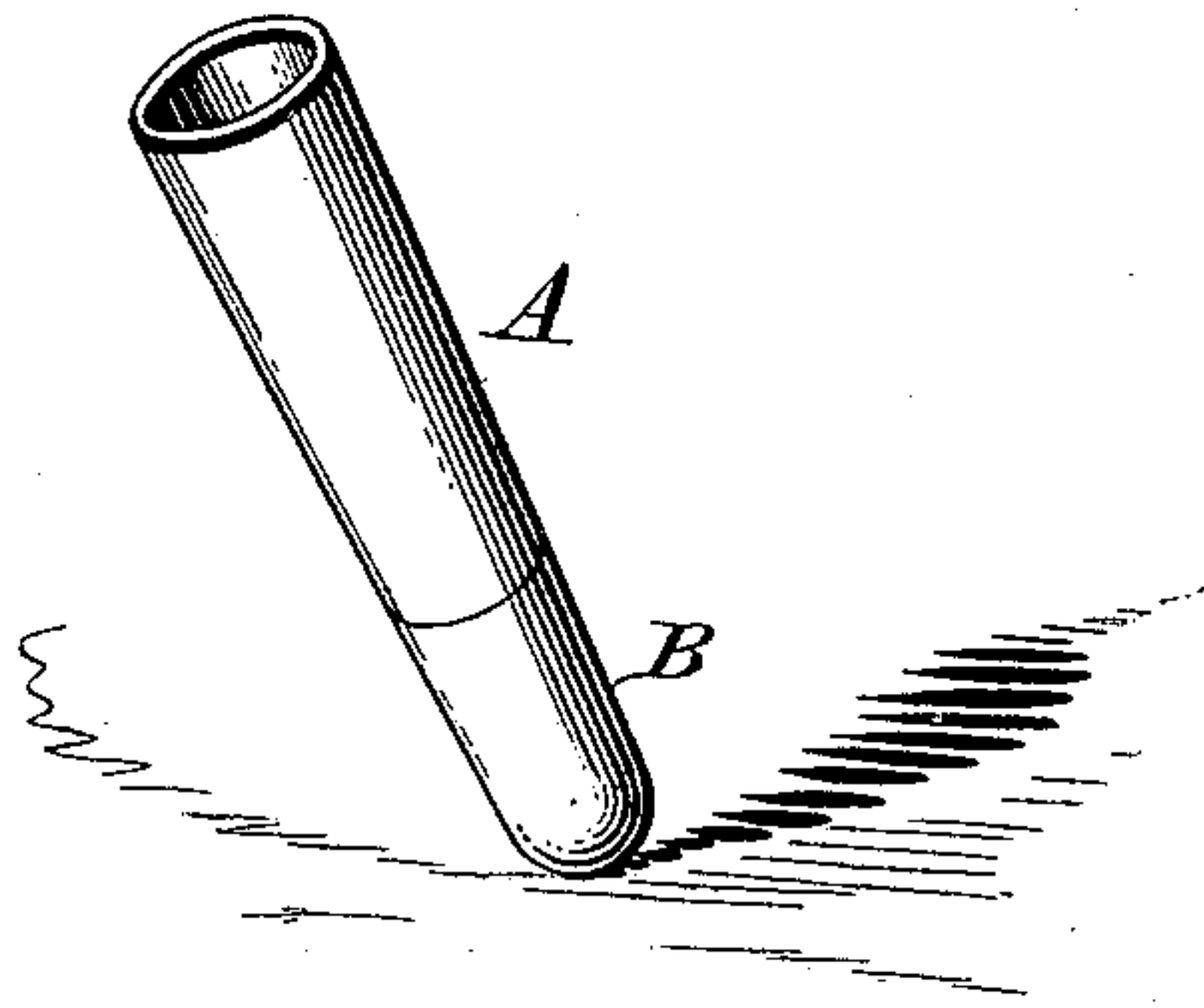


Fig. 2.

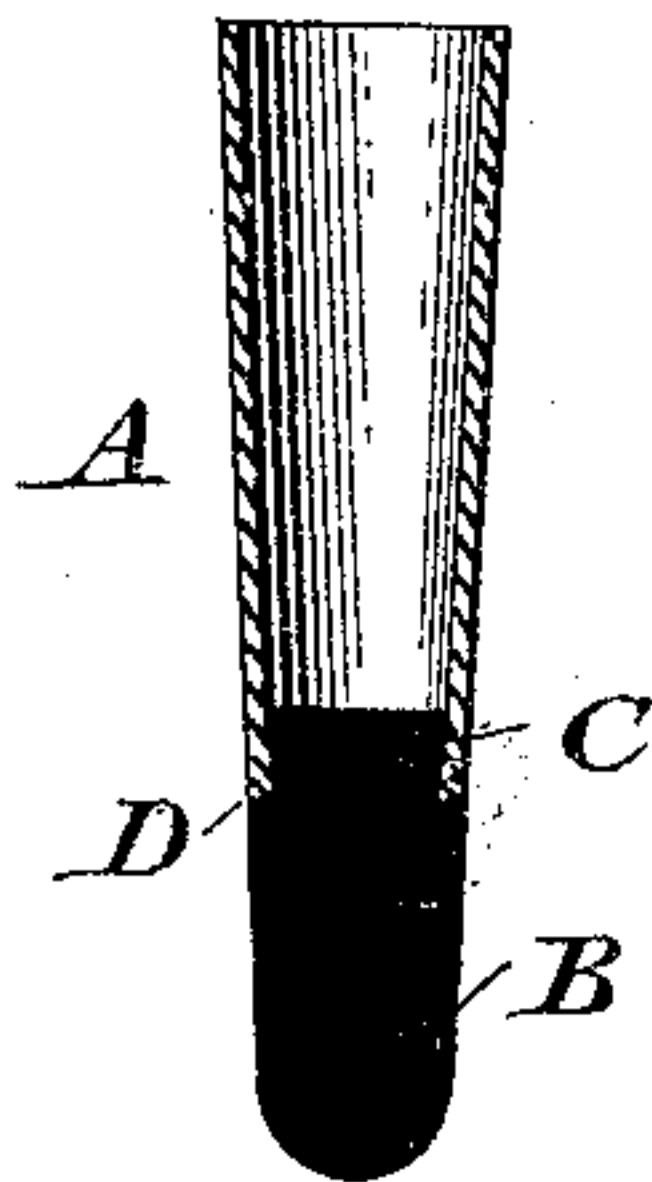


Fig. 3.



WITNESSES:

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FERRULE.

SPECIFICATION forming part of Letters Patent No. 410,828, dated September 10, 1889.

Application filed July 11, 1889. Serial No. 317,159. (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 Umbrellas, Canes, &c., which improvement is fully set forth in the following specification and accompanying drawings.

10 My invention consists of a ferrule having a point or tip connected with the same by means of a dovetailed joint, the same being formed by a neck on said point, and the metal of the ferrule embracing said neck.

15 Figure 1 represents a perspective view of a ferrule embodying my invention. Fig. 2 represents a longitudinal section thereof. Fig. 3 represents a longitudinal section, the parts being separated and in the condition prior to connection.

20 Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a ferrule, and B designates the point or tip thereof, the former being constructed of sheet metal and the latter of steel, iron, or other cast or wrought metal. The ferrule is primarily a tube open at both ends, the bottom receiving the point, the latter having at its upper end an inverted conical neck C or a neck that is tapering, the narrowest part thereof being below, leaving the shoulder D thereat. The

point is inserted in the ferrule, the lower end of the latter resting against the shoulder D, and the ferrule is then subjected to pressure 35 by rolling or otherwise at the part circumscribing the neck, whereby it closes upon the neck, forming a dovetailed joint, thus firmly connecting the point with the ferrule and producing a simple, inexpensive, and durable device for the purpose intended, the ferrule being nicely sustained on the shoulder D and not being liable to be withdrawn from the neck. 40

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is— 45

1. A ferrule and point connected by a dovetailed joint, substantially as described.

2. A ferrule, in combination with a point, 50 the latter having an inverted tapering neck, and the former embracing said neck, substantially as described.

3. A ferrule, in combination with a point, the latter having an inverted tapering neck 55 and a shoulder at the narrow part thereof, the lower end of the ferrule resting against the neck, and the adjacent portion thereof bent upon said neck, substantially as described.

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Witnesses:

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