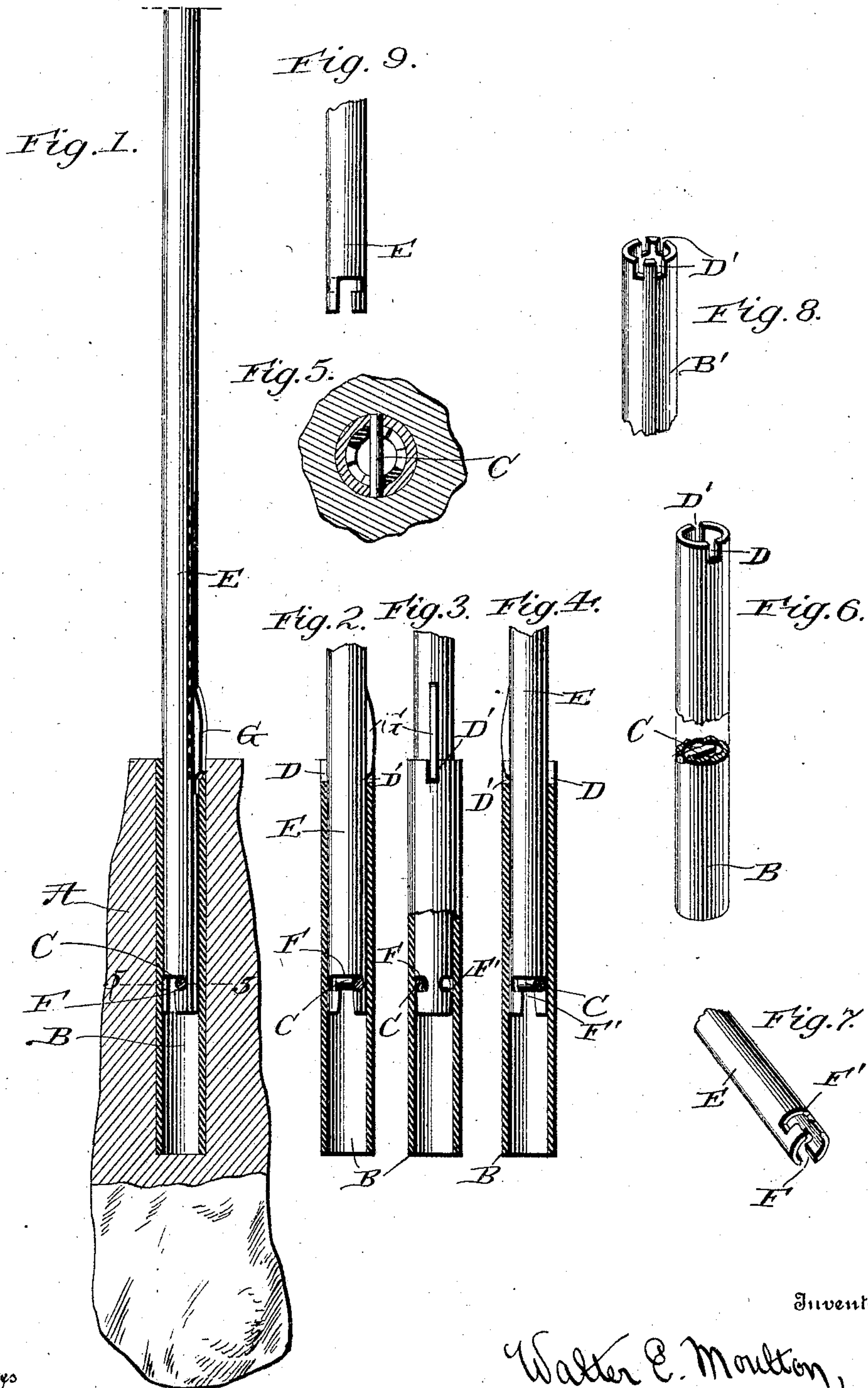


No. 790,148.

PATENTED MAY 16, 1905.

W. E. MOULTON.  
UMBRELLA.

APPLICATION FILED MAR. 20, 1905.



Inventor:

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Witnesses  
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Fannie Hise



# UNITED STATES PATENT OFFICE.

WALTER E. MOULTON, OF PLAIN CITY, OHIO, ASSIGNOR TO THE MOULTON WIRELESS UMBRELLA COMPANY, OF PLAIN CITY, OHIO, A CORPORATION OF ARIZONA TERRITORY.

## UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 790,148, dated May 16, 1905.

Application filed March 20, 1905. Serial No. 251,114.

*To all whom it may concern:*

Be it known that I, WALTER E. MOULTON, a citizen of the United States, residing at Plain City, in the county of Madison and State of Ohio, have invented certain new and useful Improvements in Umbrellas, of which the following is a specification.

My present invention pertains to umbrellas, and relates more particularly to an improved device for securing the handle to the staff. The construction is such that the handle may be readily detached and as readily secured in position, the parts interlocking in such a manner as to preclude endwise movement of the staff or any rotation thereof with reference to the handle.

In the drawings, Figure 1 is a side elevation of a portion of a staff and handle, the latter and the retaining-sleeve being shown in section. Figs. 2, 3, and 4 are similar views, the parts in Figs. 3 and 4 being seen at an angle of ninety and one hundred and eighty degrees, respectively, to that shown in Fig. 2; Fig. 5, a transverse sectional view on the line 5 5 of Fig. 1; Fig. 6, a perspective view of the sleeve or retaining-tube, it being broken away to more clearly disclose the cross-wire or locking-pin; Fig. 7, a perspective view of the lower end of the staff; Fig. 8, a perspective view of a slightly-modified form of sleeve or tube, and Fig. 9 a side elevation of a modified form of staff.

Referring to the drawings, A denotes the handle, which is bored out to receive the sleeve or retaining-tube B. Said tube is provided with a cross-pin C, while in its upper end are formed two oppositely-disposed notches D and D'.

E designates the staff, preferably formed of a piece of steel tubing drawn to the required diameter and provided at its lower end with two diametrically-disposed T-shaped slots F F'. The staff is likewise provided with an outwardly-projecting locking-spring G, which is of the usual construction or such as is generally employed in connection with the runner, the spring being out of vertical alignment with the vertical portions of the slots.

When it is desired to lock the staff to the handle, the staff is passed into the sleeve and rotated, if necessary, to bring the vertically-disposed portions of the T-shaped slots F F' into line with the cross-pin C. The staff is then forced inward until the pin comes into line with the horizontal portions of the slots and is then given a slight turn, which causes the pin to pass into said horizontal portions and likewise brings spring-catch G into alignment with one or the other of the notches D D', which it enters. The engagement of the spring with the tube prevents any rotation of the parts, and so long as they are thus held pin C prevents longitudinal separation.

In Fig. 8 the retaining-sleeve B' is shown as provided with four notches D'. With such a construction the staff may be rotated in either direction to cause the parts to lock, the cross-pin passing into the horizontal portions of the slots F F' to one or the other side of the vertical slots, according to the direction of rotation.

In case but two oppositely-disposed slots or notches, as D D', Fig. 6, are employed the staff must always be rotated in the same direction to effect a locking action. With such construction a pair of inverted-L slots in the end of the staff would suffice. From a mechanical point of view it is easier and cheaper to form the T-slots and the invention is so illustrated, it being understood, however, that a slot with a lateral offset may be used with a sleeve having but two oppositely-disposed slots in its upper end. Such a construction is shown in Fig. 9.

Having thus described my invention, what I claim is—

1. In combination with an umbrella-handle, a sleeve or tube mounted therein, said sleeve being formed with a plurality of slots in its upper end; a pin extending transversely of said sleeve; a staff provided at its lower end with two oppositely-disposed vertical slots having lateral offsets; and a spring carried by the staff, said spring being out of alignment with the vertical slots and adapted, when the parts are properly positioned, to pass into

one or another of the slots in the upper end of the sleeve, substantially as described.

2. In combination with an umbrella-handle, a sleeve or tube mounted therein, said sleeve  
5 being formed with a series of notches in its upper end; a pin extending transversely of said sleeve; a staff provided at its lower end with two oppositely-disposed T-shaped slots; and a spring carried by the staff, said spring  
10 being out of alinement with the vertical portions of said T-slots and adapted, when the parts are positioned and the pin has passed into

the horizontal portions of the slots, to enter one or another of the notches in the upper end of the sleeve, whereby the parts are held 15 against relative rotation and longitudinal separation.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WALTER E. MOULTON.

Witnesses:

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CARL R. BAKER.