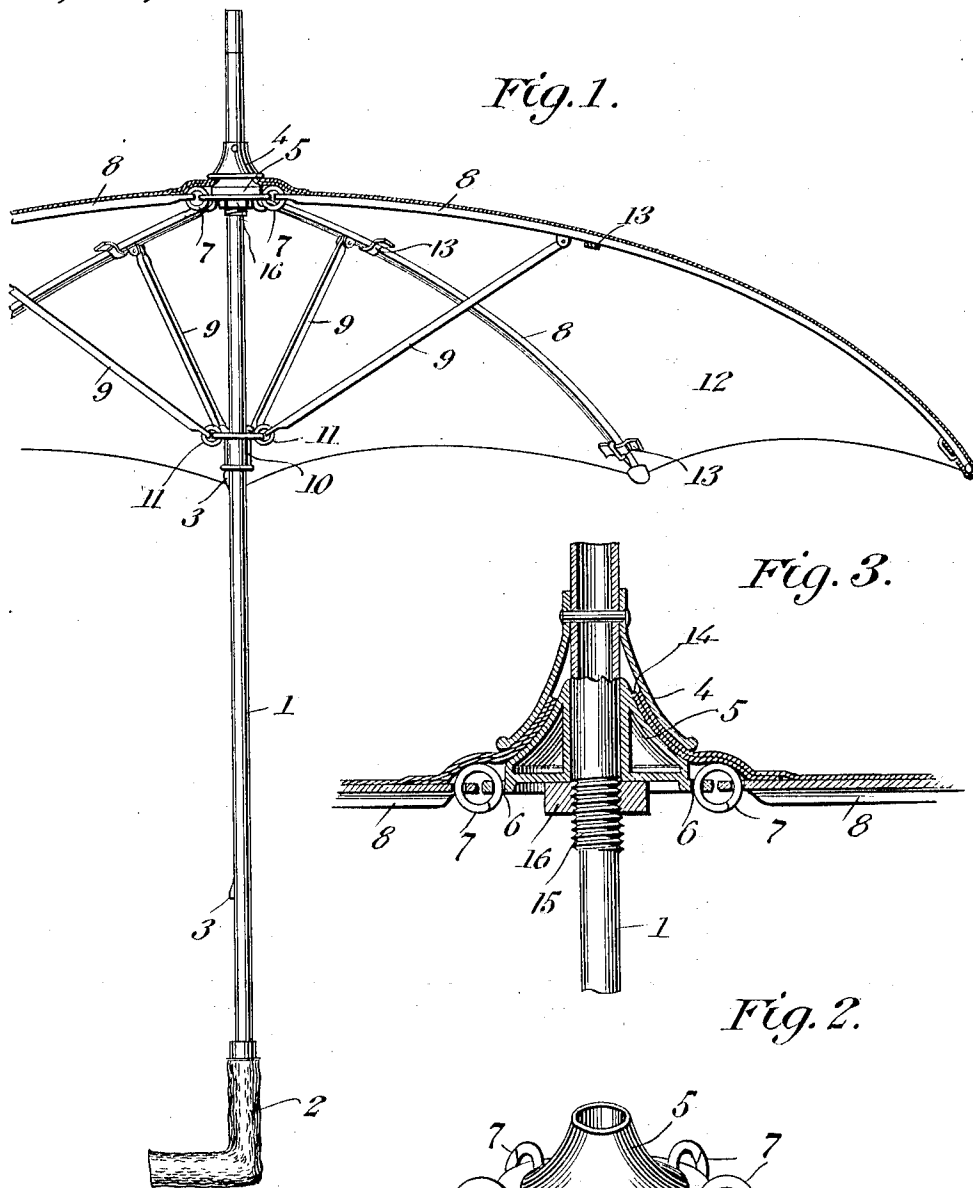


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 UMBRELLA.
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1,053,762.

Patented Feb. 18, 1913.



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UMBRELLA.

1,053,762.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES E. WATERWORTH, a citizen of the United States, residing at Las Cascadas, in the Canal Zone, Panama, have invented new and useful Improvements in Umbrellas, of which the following is a specification.

The present invention relates to improvements in umbrellas and involves the provision of a ferrule cap and crown piece co-operative to hold the covering of the umbrella in proper position, the crown carrying rings designed to receive one extremity of each of the umbrella ribs.

With the above and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter set forth in and falling within the scope of the appended claim.

In the accompanying drawing forming a part of this specification, Figure 1 is a sectional view of an umbrella constructed in accordance with the present invention, parts being in elevation. Fig. 2 is a detail view of the crown piece. Fig. 3 is an enlarged sectional view of the crown piece and ferrule cap and means for securing the same in co-operative relation upon the handle.

Similar reference characters designate like parts throughout the several views.

Referring to the accompanying drawing in detail, the umbrella as shown embodies a rod 1 terminating at one end in a handle 2 and provided with the catches 3, 3 designed to hold the umbrella in open and closed position. Rigidly secured to the rod 1 adjacent the free end thereof is a ferrule cap 4 of substantially cone shape. Coöperating with the ferrule cap 4 to hold the cover in position is a crown piece 5 to be described more fully hereinafter. The crown piece 5, as shown, is of frusto conical shape and has its outer enlarged peripheral edge formed with a plurality of spaced openings 6 in which are mounted split rings 7 of any well known or preferred material, wire being preferable. These split rings 7 are designed to receive the apertured ends of the umbrella ribs 8. Pivottally connected to each rib 8 adjacent its free end is a brace 9 having connections with a runner 10 slidable along the rod 1 and adapted to be engaged by one or the other of the catches 3 to hold the umbrella in its open or closed position. The brace 9 is connected to the runner 10 by

means of split rings 11 similar to the rings hereinbefore described with reference to the crown piece, thus permitting free and easy movement of the parts in the opening and closing operations of the umbrella.

Embracing the ribs 8 is a cover 12 constructed of rubber or other suitable resilient material and fastened to the ribs through the medium of resilient bands 13 having their opposing ends overlapping and cemented. The cover 12 is provided with a centrally arranged reinforced opening 14 designed to receive the rod 1 and disposed intermediate the ferrule cap 4 and the crown piece 5 so that in the movement of the latter to engagement with the cap, the cover may be clamped between the crown piece and cap to securely hold the same in its applied position upon the ribs of the umbrella.

In order to hold the crown piece in engagement with the ferrule cap and produce this clamping action upon the cover, the rod 1 immediately adjacent the crown piece 5 and at one side thereof, is formed with screw threads 15 with which is engaged a nut 16 designed to engage the crown piece 5 and securely hold the same in coöperative relation with the ferrule cap, thus securely holding the cover upon the ribs and preventing the displacement of the same in the operation of the umbrella to open and closed position.

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

An umbrella comprising a rod, ribs and braces, said rod having a threaded portion, a cone-shaped ferrule cap stationary upon the rod, a cone-shaped crown piece slidable upon the rod and adapted to be disposed within said ferrule cap and having a relatively large base, a cover upon the ribs and fastened thereto and having a portion intermediate said cap and crown piece, connections between the peripheral edge of the base of said crown piece and the adjacent ends of the ribs, and a nut threaded upon the threaded portion of said rod and adapted to force the crown piece into the ferrule cap.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. WATERWORTH.

Witnesses:

F. G. CALVERT,

F. W. LEYDECKER.