

L. SHERIDAN.

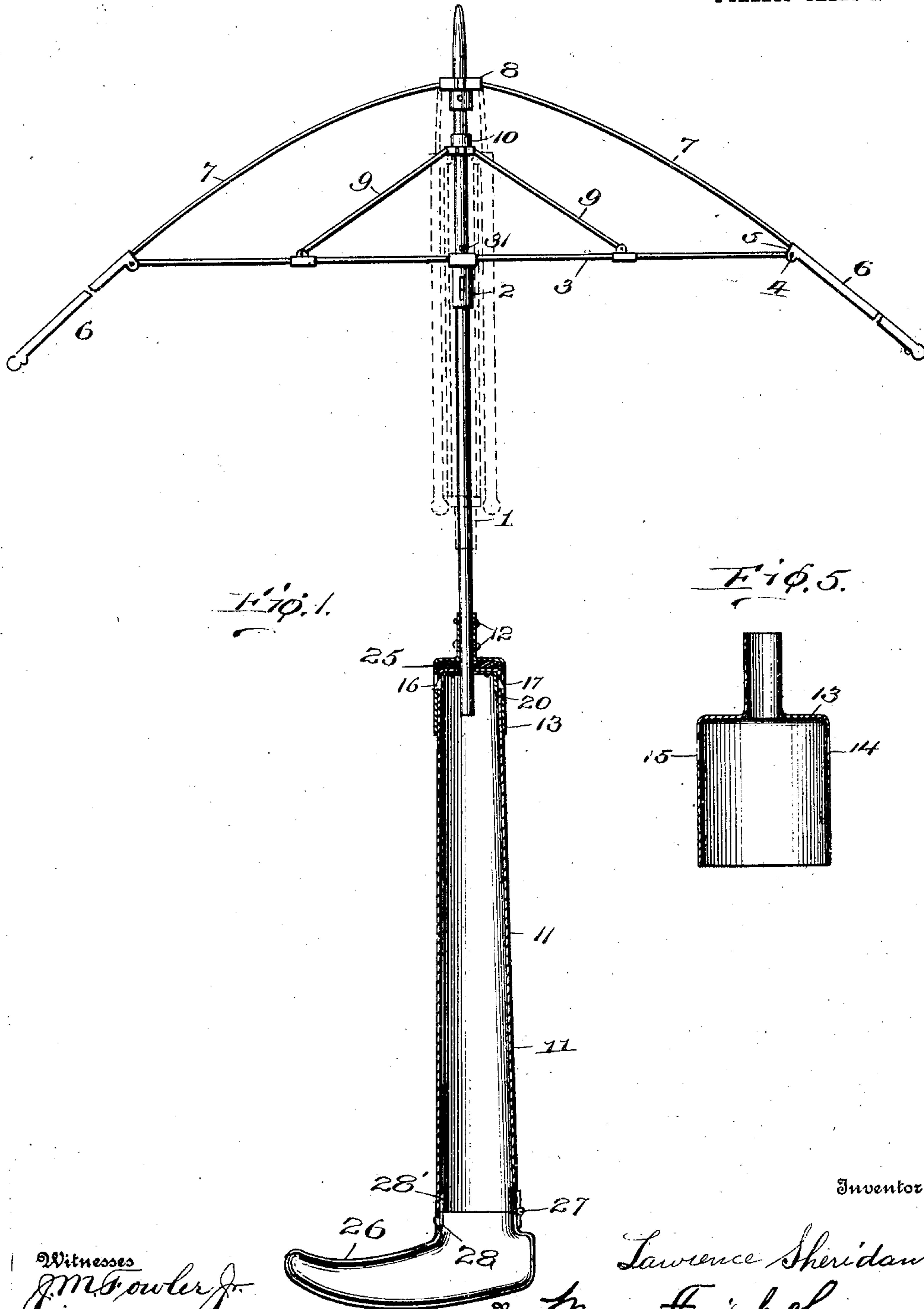
UMBRELLA.

APPLICATION FILED SEPT. 24, 1908.

Patented June 15, 1909.

2 SHEETS—SHEET 1.

925,043.



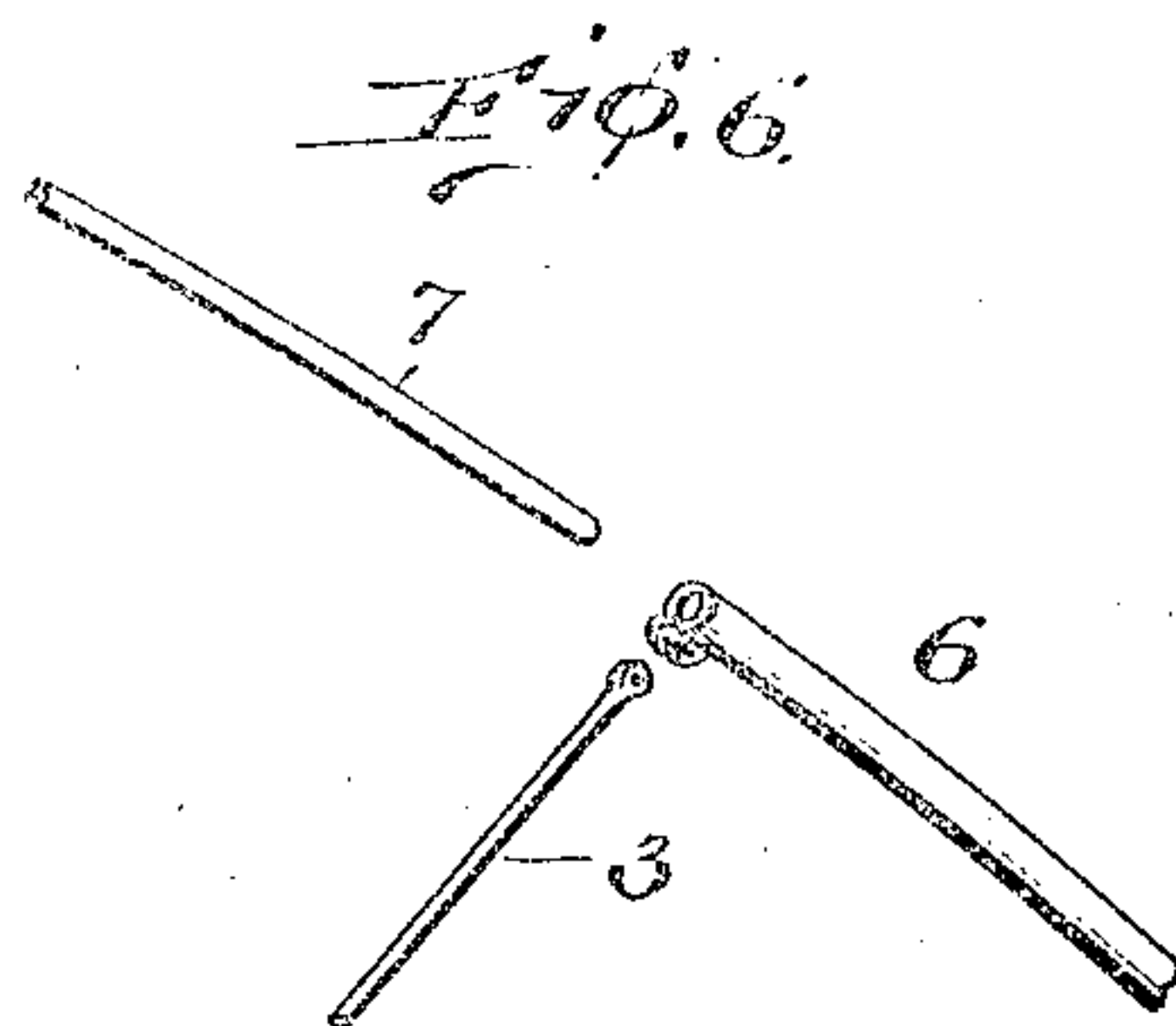
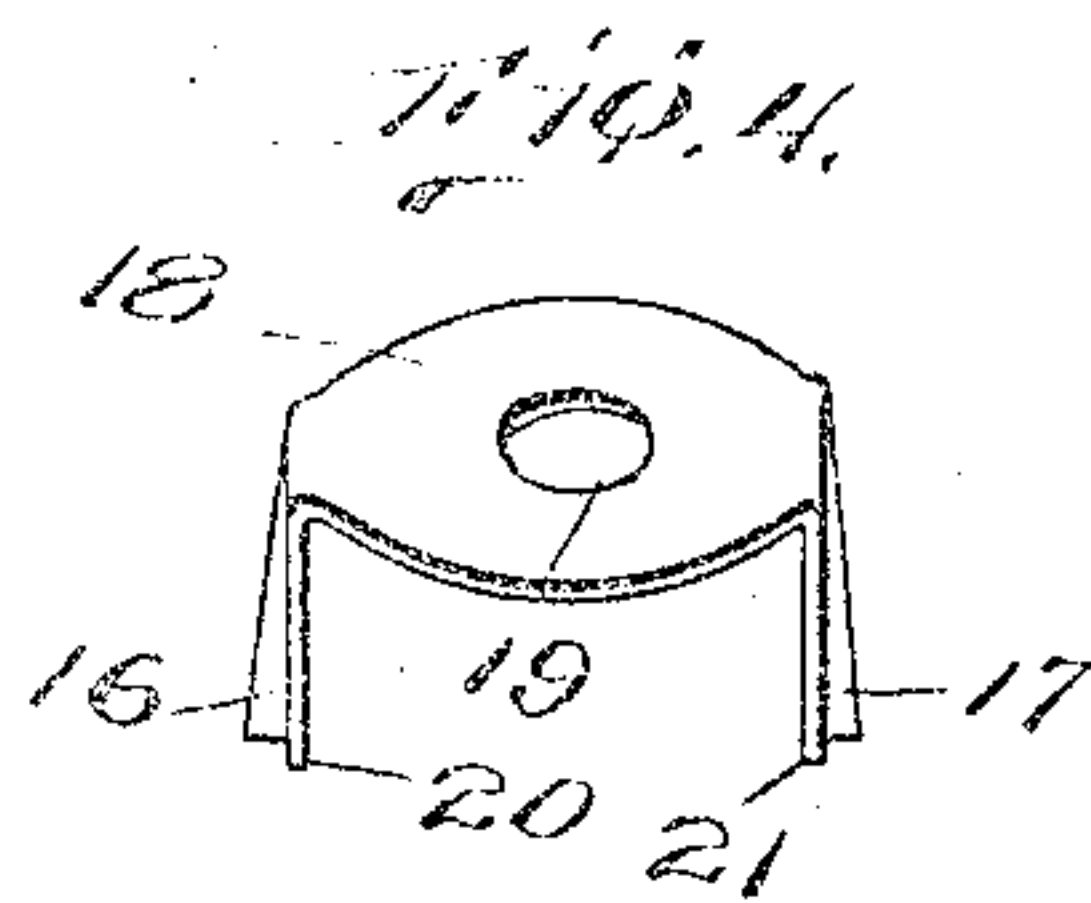
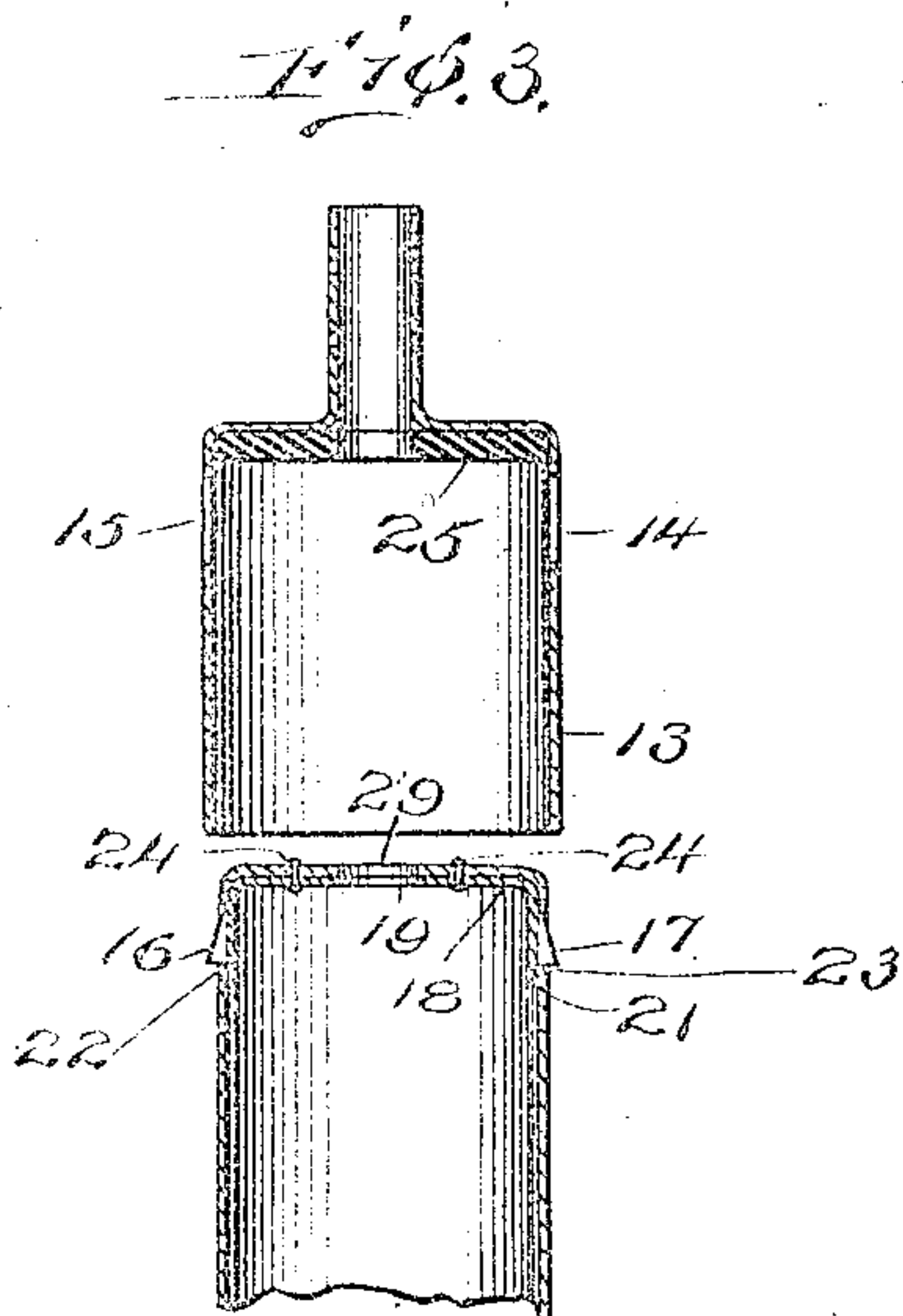
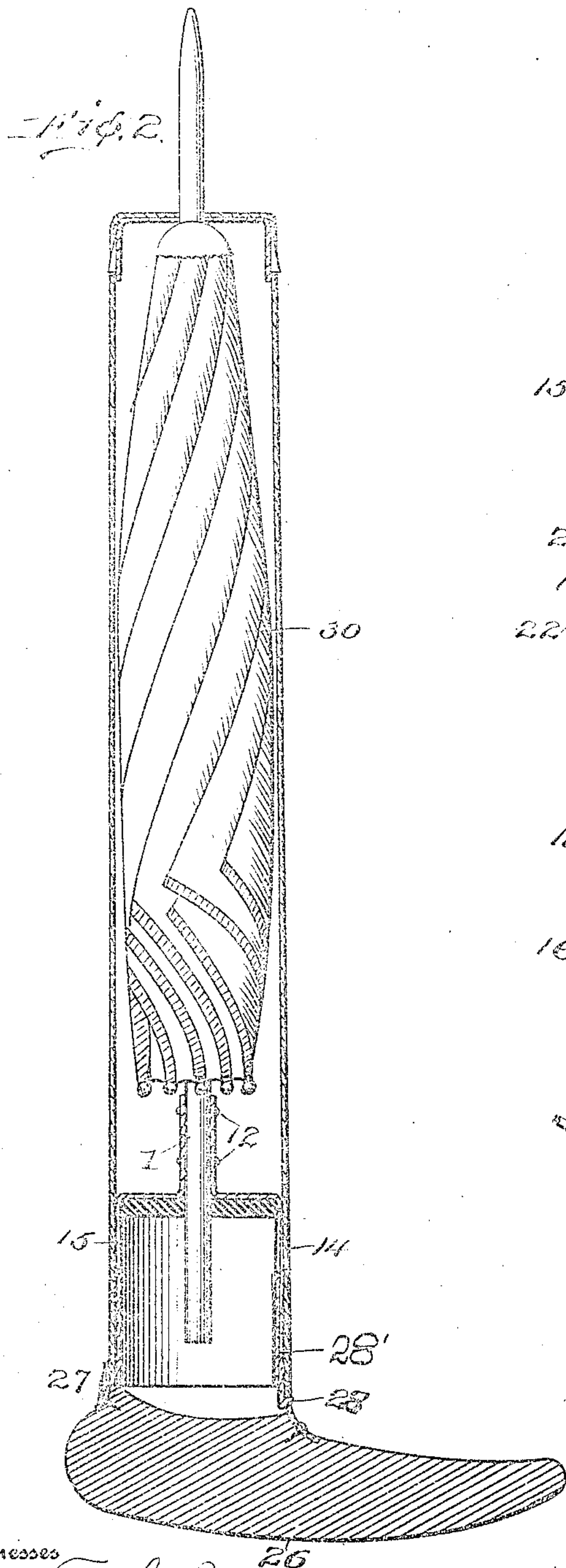
Witnesses
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his Attorneys

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UNITED STATES PATENT OFFICE.

LAWRENCE SHERIDAN, OF SCRANTON, PENNSYLVANIA.

UMBRELLA.

No. 925,043.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed September 24, 1908. Serial No. 434,569.

To all whom it may concern:

Be it known that I, LAWRENCE SHERIDAN, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Umbrellas; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in umbrellas, and particularly to umbrellas that may be folded and have the top of the umbrella after folded inserted into the handle.

The object in view is the provision of an umbrella that may be folded and in folding the ribs become shortened by telescoping one into the other.

Another object in view is the provision of a folding umbrella arranged with a hollow handle removably secured to the stem of the umbrella and arranged to receive the umbrella for protecting the same.

A still further object in view is the provision of an umbrella adapted to be folded and the umbrella part inserted into a handle, and means for holding the handle and the stem of the umbrella together when in use.

With these and other objects in view the invention comprises certain novel constructions, combinations and arrangement of parts as will be hereinafter more fully described and claimed.

In the accompanying drawings: Figure 1 is a longitudinal sectional view through an umbrella constructed according to the present invention, the covering being removed in order to better disclose the mechanism. Fig. 2 is a vertical sectional view through the handle of the umbrella showing the body portion of the umbrella folded and positioned therein. Fig. 3 is an enlarged view of the lower end of the umbrella stem and the upper end of the handle, the same being shown slightly separated for the purpose of illustration. Fig. 4 is a detail perspective view of a pair of spring catches used in holding the handle to the stem of the umbrella. Fig. 5 is a sectional view through the retaining sleeve secured to the stem of the umbrella. Fig. 6 is a detail fragmentary perspective view of one of the ribs and one of the stays of the umbrella, the same being shown separated for the purpose of illustration.

Referring to the drawing by numerals, 1

indicates the stem of an umbrella, and 2 indicates a slide constructed in the usual manner of slides for umbrellas to which is pivotally mounted the stays 3 that may be of any desired construction. The stays 3 extend outward and are pivotally mounted at 4 to ears 5 on a hollow rib 6. The rib 6 forms only part of the rib of the umbrella, the remaining part being formed from a preferably solid rib 7. The ribs 7 are pivotally mounted upon a stationary support 8, the same being preferably riveted to stem 1 in order to prevent any movement thereof. The stays 3 are pivotally mounted upon slide 2 and have in turn pivotally secured thereto fulcrum levers or operating stays 9 which in turn are pivotally mounted upon a stationary support 10. The stationary support 10 is preferably considerably smaller than the stationary support 8 so that when the umbrella is collapsed or lowered, ribs 7 may lie on top of stationary member 10 and be positioned substantially parallel with stem 1.

In order to close the umbrella or collapse the same all that is necessary is to move sliding member 2 downward toward the handle 11. This will cause the hollow ribs 6 to telescope over ribs 7 until the ends of the hollow ribs 6 are near the stationary part 8, and as the movement of slide 2 is continued downward after the ribs 6 have been telescoped over ribs 7 all of the ribs will be moved downward or toward stem 1 until the entire umbrella is collapsed. After the umbrella is collapsed the ribs extend only a slight distance beyond the end of ribs 7 as the hollow ribs 6 have telescoped over ribs 7 until ribs 7 have come substantially to the ends of ribs 6. When opening the umbrella the upward movement of slide 2 is limited by pin 31 so as to positively insure the hollow rib 6 from slipping off the rib 7.

Secured to the lower end of stem 1 preferably by rivets 12 is a sleeve 13. Sleeve 13 may be made of any kind of material, preferably of some strong metal, and is adapted to fit snugly over the end of handle 11. Sleeve 13 is formed with slots or apertures 14 and 15 through which catches 16 and 17 are adapted to pass for holding the stem 1 to the handle 11. The catches 16 and 17 are secured to a disk 18 formed with an aperture 19 through which stem 1 projects and is also formed with depending spring members 20 and 21 which permit the catches 16 and 17 to force inward when pressure is applied against the

outer surface or again permit the catches to move out and engage sleeve 13. The disk 18 is mounted within the upper end of handle 11 that is made hollow and preferably of some light material as sheet aluminum so that the catches 16 and 17 may project through apertures 22 and 23. The disk 18 is preferably held in place by rivets 24 which allow a perfectly free springing movement of spring members 20 and 21. When it is desired to connect the handle 11 with stem 1 the upper end of the same, as shown in Fig. 3, is forced into sleeve 13 until the upper end of the handle engages a yielding member 25 that is preferably of rubber. The handle is then forced against the rubber packing 25 until the same is compressed to a considerable extent, and as soon as the upward movement of the handle 11 has thus compressed rubber 25 catches 16 and 17 will have come opposite notches 14 and 15 and snapped therethrough. The handle is thus securely fastened in position, and by reason of the rubber 25 a continuous pressure is brought into the handle 11 so as to prevent any loose movement thereof. Also it will be observed that the sleeve 13 extends some considerable distance down over the end of handle 11 for assisting in preventing any loose movement of the handle.

Handle 11 is formed from any desired metal, though sheet aluminum is preferable as the same is very light and easily worked. The handle is constructed hollow throughout excluding the gripping portion 26 which is constructed in any desired way and is pivotally mounted at 27 to the handle and held in place by a catch 28 which in turn is held in proper position by a spring 28'. The handle 11 is made slightly larger at the lower end than it is at the top in order that when the umbrella is collapsed or folded gripping member 26 may be unhooked and the body portion of the umbrella inserted into the handle as seen in Fig. 2. When the body portion of the umbrella has been inserted into the handle 11 sleeve 13 will occupy a position inside the handle at the lower end thereof as sleeve 13 incloses the upper end of the handle when the umbrella is in use, and therefore it is necessary to have the lower end of the handle sufficiently large to accommodate the sleeve as will be evident. When the umbrella has been folded and inserted into the handle the ferrule projects through opening 19 in disk 18, and also through opening 29 in the top end of handle 11.

In constructing umbrellas it will be evident that various sized umbrellas may be made, and various slight changes also be used without departing from the spirit of the invention. In connection with the ribs 6

and 7 any desired covering as 30 may be used and connected thereto in any desired manner in order to permit of the proper operation of the ribs as heretofore set forth, and also any desired shaped handle may be formed, straight as shown or curved, without departing from the spirit of the invention, the main requisite being a handle that will accommodate the body portion of the umbrella as set forth.

What I claim is:

1. In an umbrella, a body portion formed with a stem, a handle, a sleeve secured to said stem and adapted to fit around the upper end of said handle, catches secured to said handle and adapted to engage said sleeve when the upper end of said handle is forced into said sleeve, and a filling of rubber secured to said sleeve for yieldingly resisting the insertion of the end of said handle into said sleeve, whereby said catches are prevented from engaging said sleeve until the handle is in correct position, and at the same time preventing any loose motion of said handle.

2. In an umbrella, a body portion formed with a stem, a sleeve secured to said stem, a handle adapted to fit in said sleeve, a pair of catches adapted to engage said sleeve for locking said handle to said sleeve, and springs secured to said handle for actuating said catches.

3. In an umbrella, a body portion formed with a stem, a handle, a sleeve secured to said stem and adapted to fit around the upper end of said handle, spring compressed catches secured to said handle and adapted to engage said sleeve when the upper end of said handle is forced into said sleeve, and resilient means for preventing said catches from engaging said sleeve until the handle is in correct position and for also preventing any loose motion of said handle.

4. In an umbrella, a body portion formed with a stem, a handle, a sleeve rigidly secured to said stem and adapted to telescope over part of said handle, said sleeve being formed with apertures therein for accommodating catches, spring compressed catches mounted in the upper end of said handle and adapted to take a position within the apertures in said sleeve for locking said sleeve and said handle together, and a rubber cushion secured to the upper part of said sleeve for holding said handle in correct position.

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

LAWRENCE SHERIDAN.

Witnesses:

WALTER L. SCHANZ,
A. L. KITCHIN.