No. 765,287. PATENTED JULY 19, 1904.

R. C. & J. D. KING.

UMBRELLA.

APPLICATION FILED JULY 15, 1903.

NO MODEL.

Fig. 1.

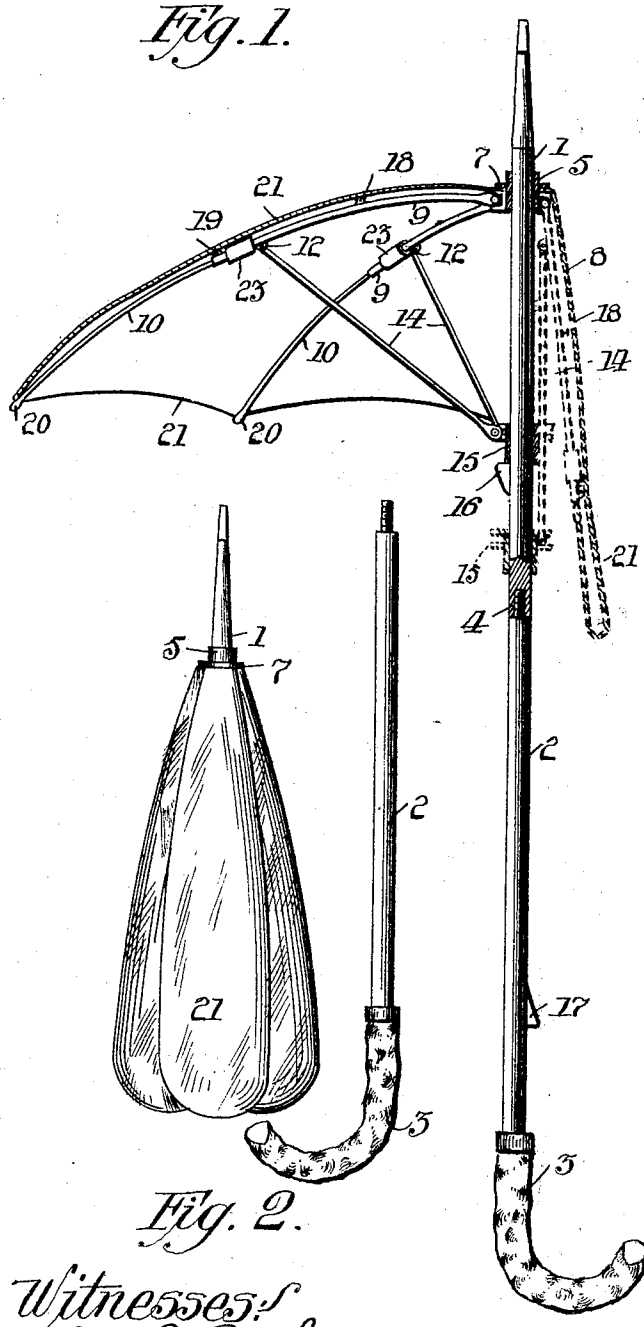


Fig. 2.

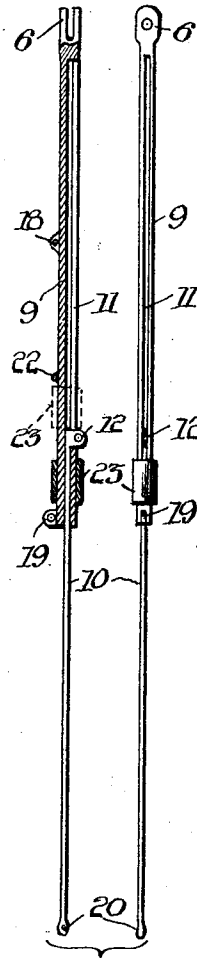


Fig. 3.

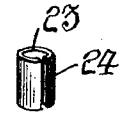


Fig. 4.

Witnesses:
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E. E. Potter.

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J. D. King
By
Attorneys.

No. 765,287. Patented July 19, 1904.

UNITED STATES PATENT OFFICE.

RICHARD C. KING AND JOHN D. KING, OF PITTSBURG, PENNSYLVANIA.

UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 765,287, dated July 19, 1904.

Application filed July 15, 1903. Serial No. 165,625. (No model.)

To all whom it may concern:

Be it known that we, RICHARD C. KING and JOHN D. KING, citizens of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Umbrellas, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in umbrellas, and relates more particularly to a folding umbrella, and has for its object to provide novel and effective means whereby an umbrella may be folded in such a manner that its length may be decreased to substantially one-half the extended length of the umbrella-stock, whereby the umbrella may be conveniently carried in a grip, trunk, or other case.

The present invention relates more specifically to the construction of rib, which is made telescopic, whereby the two sections fold in a manner to materially decrease their length when the umbrella is in the collapsed form. In connection with this we provide means for disjoining the handle and stick into two or more pieces, whereby to decrease the length of the stick in order to permit the packing of the umbrella into a case of materially shorter length than the length of the extended stick.

The invention in detail will be hereinafter more fully described, and specifically pointed out in the claim, and in describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate like parts throughout the several views, in which—

Figure 1 is a vertical sectional elevation of our improved umbrella, showing a portion of the umbrella in the open or raised form and a portion thereof in the collapsed or folded form. Fig. 2 is an elevation of the umbrella in its disjointed and folded form. Fig. 3 shows an enlarged vertical sectional view and side elevation of one of the ribs. Fig. 4 is a detached detail perspective view of the locking-sleeve which may be employed for holding the ribs in the extended position.

To put our invention into practice, we provide a stick or rod comprising an upper section or member 1, a lower section or member 2, and a suitable handle 3. The sections or members 1 and 2 of the rod or stick are adapted to be disjointed from each other, and a convenient means of connecting the same together so that they may be readily disconnected is that of providing the lower end of the member 1 with a threaded socket to receive the threaded stud or shank 4 on the upper end of the member 2. In practice we will doubtless also preferably connect the handle to the member 2 in such a manner that said handle may be readily disconnected, if desired. Secured to the member 1 of the stick or rod, near the outer end thereof, is a top notch 5, in which the bifurcated ends 6 of the ribs are pivotally secured. This top notch carries an overlying disk 7, under which the cover 8 projects, whereby to shed the water from the end of the stick or rod onto the said cover. The ribs are formed in two sections or members 9 and 10, respectively, the section 10 telescoping within the section 9 and the latter having a slot 11 throughout the major portion of its length in order to permit the riding therein of the lug 12, to which lug of the respective ribs the stretchers 14 are attached, the other ends of these stretchers being pivotally attached to the runner 15, mounted on the stick or rod. This runner 15 is held in its different positions to hold the umbrella in its open or closed positions, respectively, by means of the compressible spring-catches 16 and 17, carried by the members 1 and 2 of the stick or rod. The cover 8 is attached at its upper end in a suitable manner to the top notch 5, being preferably held between this top notch and the disk 7, and the cover is also fastened to eyes 18 19, carried by the member 9 of the rib, and to an eye 20 in the lower end of the member 10 of said rib. When, therefore, the rib members are telescoped, a loop will be formed in the cover, as shown at 21, Fig. 1 of the drawings. We also preferably provide means whereby the ribs can be locked against telescoping movement when it is not desired to fold the umbrella, and thus permit the use of the latter in the ordinary manner. A convenient form of construction is to provide one

or more or all of the ribs with a projection 22. Surrounding the rib is a sleeve 23, provided with a slot 24. This sleeve is mounted on the member 9 of the rib and may be made to frictionally fit the same. As it is ordinarily below the lug 12, it does not interfere with the telescoping operation of the rib members, and in case it is desired to lock the rib members in the extended position the sleeve 23 is turned so as to aline slot 24 with the lug 12 and slot 11, and the sleeve may then be forced upward on the rib member 10 to a position above the end of said rib member 10, as shown by dotted lines in the sectional portion of the view in Fig. 3, and when the sleeve is turned so as to move slot 11 out of alinement with slot 24 the sleeve acts as a stop for the rib 10 and prevents the same from telescoping, the sleeve 23 being prevented from sliding movement on the rib member 9 by the projection 22.

It is to be noted that the looping of the cover caused by the telescoping of the ribs enables us to materially shorten the length of the umbrella when in the collapsed or folded form and that when the handle members are disconnected the umbrella is of a length which will permit its readily being packed in a traveling-case or trunk.

While we have have herein described the invention in detail as it is practiced by us, yet it will be evident that various changes may be made in the details of construction without departing from the general spirit of our invention.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In a folding umbrella the combination with a stick formed of sections detachably connected together, of a top notch carried by the stick, a runner slidably mounted on the stick, a series of ribs each comprising two sections one of which is slotted and the other of which sections telescopes into the slotted section, a slotted locking-sleeve embracing both rib-sections, a lug carried on the upper end of the last-named section and adapted to engage said sleeve to lock the rib-sections in extended position, a projection on the slotted section to limit the movement of said sleeve and stretchers pivotally connected to said lugs on the rib-sections and to the runner on the stick substantially as described.

In testimony whereof we affix our signatures in the presence of two witnesses.

RICHARD C. KING.
JOHN D. KING.

Witnesses:
A. M. WILSON,
E. E. POTTER.