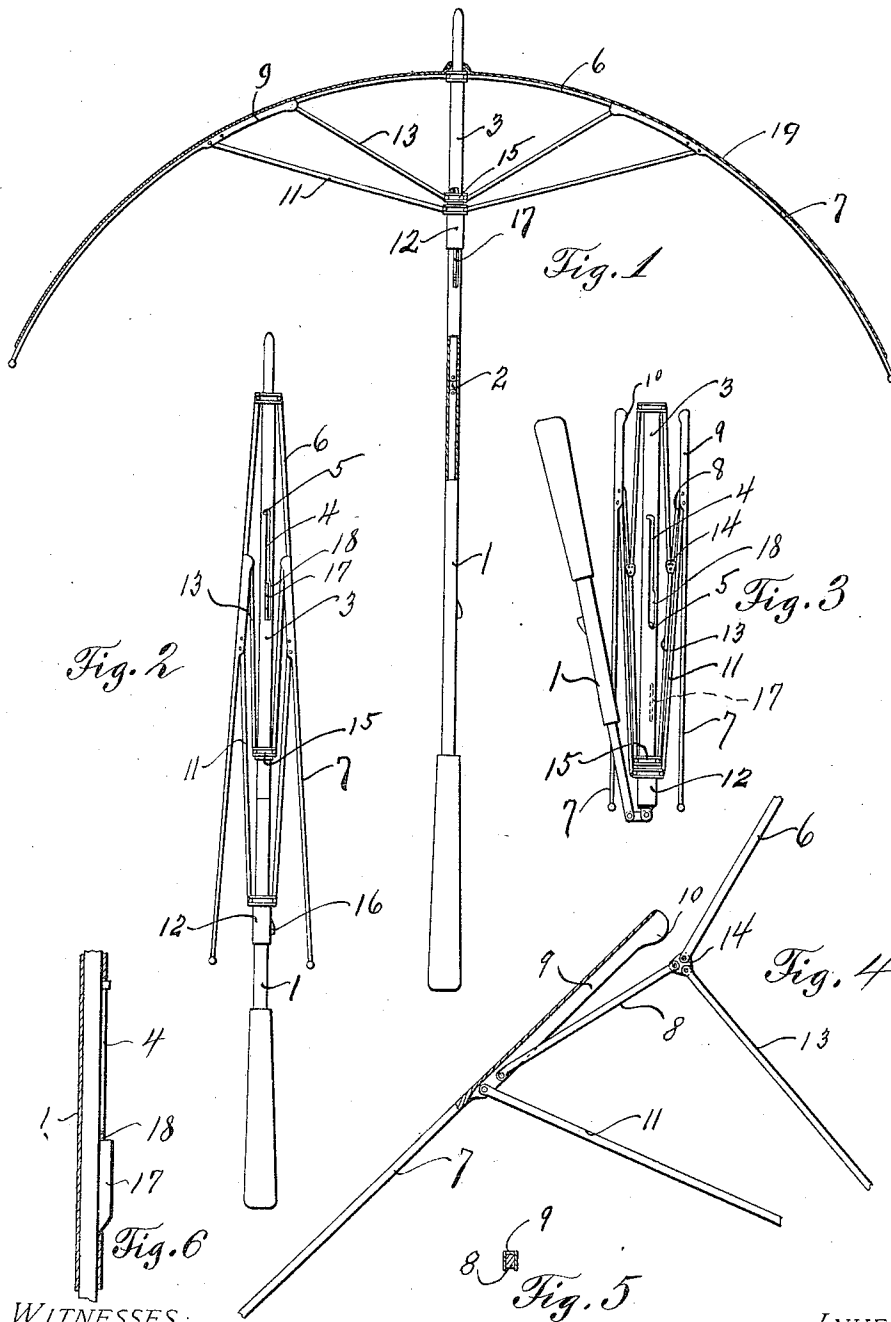


E. A. LUNDBERG.
FOLDING UMBRELLA.
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995,266.

Patented June 13, 1911.



WITNESSES:

E. Larson
N. M. Brooks.

INVENTOR

E. A. Lundberg

BY *Reuben Robb*

R. Robb

Attorneys

UNITED STATES PATENT OFFICE.

ELMER A. LUNDBERG, OF GREENSBURG, PENNSYLVANIA.

FOLDING UMBRELLA.

995,266.

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To all whom it may concern:

Be it known that I, ELMER A. LUNDBERG, a citizen of the United States, residing at Greensburg, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Folding Umbrellas, of which the following is a specification.

This invention is designed primarily to provide an umbrella which may be collapsed or folded into a small and compact form whereby the same may be carried in a satchel or the like, thus making it of a desirable and useful nature.

The present invention resides in the novel and practical construction, as hereinafter set forth.

With the above and other objects in view, this invention consists in the construction, combination, and arrangement of parts as hereinafter more fully described, claimed and illustrated in the accompanying drawings, wherein—

Figure 1 is a view showing an umbrella constructed in accordance with the present invention, the same being carried in an open position; Fig. 2 is a view illustrating the umbrella carried in a temporary closed position, thus producing the appearance of the umbrellas now in use; Fig. 3 is a view illustrating the umbrella in its collapsed or compact form whereby the same may be carried in the pocket or satchel, as the case may be; Fig. 4 is a fragmentary view disclosing more clearly the formation of the ribs; Fig. 5 is a cross section of one of the ribs; Fig. 6 is a fragmentary view illustrating the upper catch mounted on the umbrella rod.

In constructing the umbrella in accordance with the present invention, an umbrella rod 1 is provided which is jointed, as at 2, thus permitting the rod to be broken when the umbrella is in a collapsed position. Slidably mounted upon the umbrella rod is a tubular member or sleeve 3 which is provided with a slot 4 wherein a pin 5 carried by the umbrella rod is adapted to operate. It will thus be seen that the tubular member may operate to retain the umbrella rod in an operative position or permit the latter to be broken, as illustrated in Figs. 1 and 3.

A plurality of folding ribs are carried by the tubular member 3, each of said ribs comprising inner and outer sections. The inner sections 6 which are secured to the tubular

member are connected to the outer section 7 by a link member 8, said outer section having an extension 9 which is adapted to house the joints formed by the link member with the rib-sections, thus producing as strong a rib as a single non-folding one. The housing extension or portion of the rib-section 7 is provided with a pair of spring ears 10 which are adapted to house the joint of the inner section 6 and the link member 8, and also be retained to said joint by friction of the ears upon the joint. To the outer section of each rib and adjacent to the joining of said section to said link member is pivotally secured a brace or stretcher 11, the opposite terminal of which is secured to a runner 12 slidably mounted on the tubular member and umbrella rod. A second set of braces or stretchers 13 is secured to a plate 14, to which plate are also secured the link member 8 and the inner rib-section 6. The opposite extremity of the stretcher 13 is secured to a second runner 15 which is likewise slidably on the tubular member 3.

When it is desired to carry the umbrella as shown in Fig. 2, which gives the appearance of an ordinary umbrella, a catch member 16 is provided on the umbrella rod and is adapted to engage the runner 12, thereby retaining the umbrella in a closed position, as just stated. When the umbrella is in an open position the runner 12 engages a catch 17 carried on the umbrella rod 1. It will thus be seen that the runner 15 is prevented from downward movement, when in an open position, by the runner 12. A cover or canopy 19 is provided which may be secured to the ribs in any desired manner.

The catch member 17 is adapted to protrude through the slot 4 and engage the runner 12 underneath the latter. An offset portion 18 is provided in the slot 4 to permit the necessary movement of the tubular member 3 and umbrella rod 1, when it is desired to collapse the same. It will be observed that the catch member 17 is elongated whereby upon depressing the same to draw down the runner 12, the same will remain depressed until the runner 15 is passed over it. When the umbrella is in a collapsed position, as shown in Fig. 3, the catch member is concealed by the tubular member 3.

From the foregoing it will be observed that the pin 5 is retained in its seat at the upper terminal of the slot 4 by the exertion of the downward force upon the spring

catch member 17 by the runners 12, while the tendency of the inner rib-sections 6 is to exert an upward force on the tubular member.

5 Having thus fully described my invention, what is claimed as new is:—

10 In a folding umbrella, the combination with a jointed umbrella rod, of a pair of runners slidable thereon, ribs carried by said rod, each rib comprising an outer rib section, an inner rib section, a connecting plate secured to said last named section, and a link member connecting said outer rib section with said plate, said outer rib section

having an inwardly projecting extension, a 15 set of stretchers carried by one of said runners and secured to the connecting plates, and a second set of stretchers carried by the other of said runners and secured to said outer rib section to prevent the breaking of 20 the rib joints when the umbrella is temporarily closed, as herein specified.

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

ELMER A. LUNDBERG.

Witnesses:

SAMUEL MORGAN, Jr.,
THOMAS H. MCKINLEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
