E. P. JONES.

Improvement in Devices for Opening or Closing Umbrellas.

No. 123,912. Patented Feb. 20, 1872.

Fig. 1.

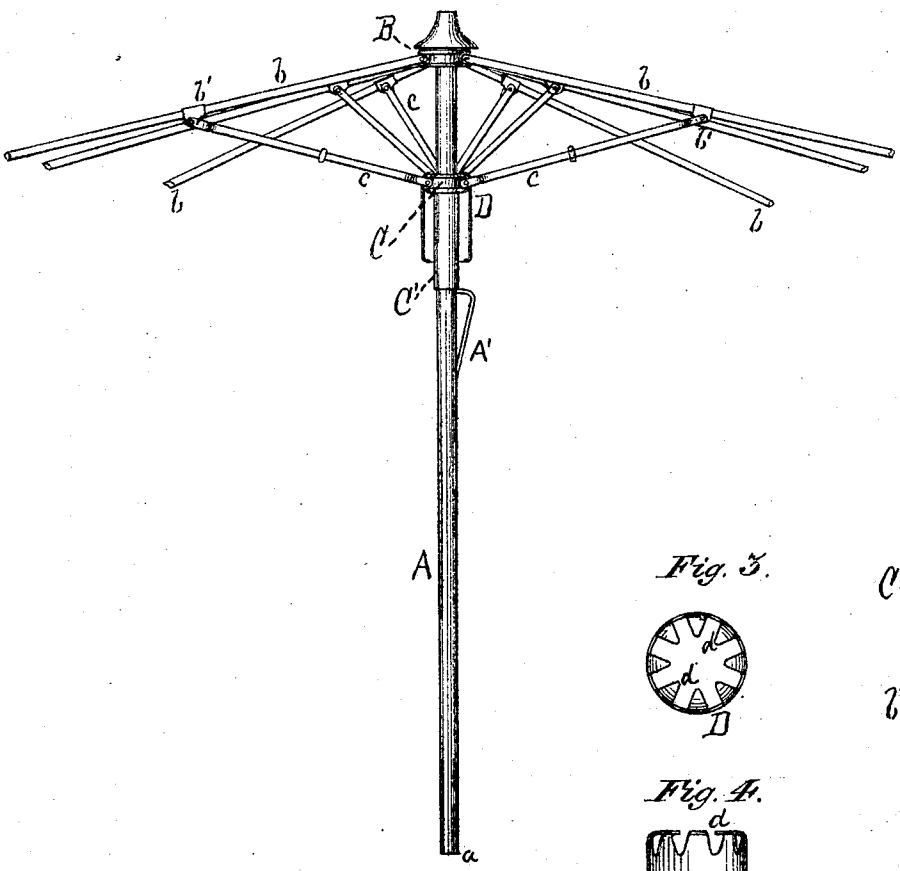

Fig. 2.

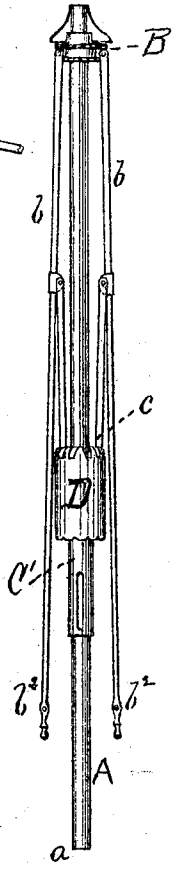

Fig. 3.

Fig. 4.

Fig. 5.

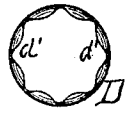

Fig. 6.

Witnesses:
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UNITED STATES PATENT OFFICE.

EDWARD P. JONES, OF SHELL MOUND, MISSISSIPPI.

IMPROVEMENT IN DEVICES FOR OPENING OR CLOSING UMBRELLAS.

Specification forming part of Letters Patent No. 123,912, dated February 20, 1872; antedated February 5, 1872.

To all whom it may concern:

Be it known that I, EDWARD P. JONES, of Shell Mound, in the county of Sunflower and State of Mississippi, have invented certain new and useful Improvements in Umbrellas, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a vertical sectional view of my improved clasp as applied to a raised umbrella. Fig. 2 shows the clasp on the folded umbrella. Fig. 3 is a top view of the clasp. Fig. 4 is a vertical sectional view of the clasp. Fig. 5 is a bottom view of the clasp. Fig. 6 represents a top and front view of a modified form of clasp.

The scale of the drawing is one-half the full size.

My invention consists in applying to the ordinary umbrella or parasol frame a slide-clasp or sliding sleeve, so constructed and attached as to support and strengthen the braces and rigidly lock them in their proper position, whether the umbrella is opened or closed. This clasp or sleeve incloses the brace-rods when the umbrella is folded, traveling or sliding a short distance over the surface of the same, and so gathers these rods together in a close compact bunch as to prevent all lateral vibration or twisting of the rods, it matters not how the umbrella may be carried. This rigidly bundling and locking or tying the brace-rods together has a like effect on the ribs. They are also held in a steady vertical position, and the umbrella, when folded, is reduced to the most compact form conceivable. The sockets on the head of the clasp or sleeve that encircle and fasten the brace-rods when closed furnish socket-bearings for the same when extended as the radial brace-supports for the ribs.

The advantages accomplished by this arrangement will readily suggest themselves. My clasp or sleeve, without adding to the cost or weight of the umbrella, greatly strengthens it, and, consequently, adds to its durability. This it does by freeing the wire that secures the ribs, and which braces and furnishes the hinged bearing of each, from all twisting or wrenching, which is chiefly due to the lateral vibration and swinging of the rods. It so incases the collar on the runner to which the brace-rods are fastened, and its rough joints, as to prevent the fraying and wearing of the cover, as is now the case. It adds greatly to the neatness of the umbrella by so holding or grasping it together as to prevent its having, after it has been a little used, the ungainly flaring appearance now so universal.

To enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

A is the rod or staff of the umbrella or parasol, and to the end *a* of which any suitable handle may be attached. *b b* are the ribs, and are secured in the stationary collar or holder B by means of a wire, and so as to form a hinged connection in the usual manner. *c c* are the stretcher-braces or brace-rods, which are secured in the collar C of the runner C′ in the usual manner—that is, by means of a wire—so as to form a hinge-joint. The ribs *b b* and brace-rods *c c* are connected by means of a pivot or joint pin, b^1, as in the ordinary umbrella. The runner C′ is of the common style; but in new umbrellas the slot cut through its wall, and which in connection with the spring-catch has heretofore been required to fasten the umbrella when closed, may be discarded, as with my improved clasp this style of fastener is dispensed with. D is the clasp or sleeve, which is of tubular form, and constructed of metal or any other suitable material, and by any desired process. The form of this clasp is distinctly shown in Figs. 3, 4, and 5. Its upper face consists of a series of serrated teeth, *d d*, and its lower one of a series of scallops, *d′ d′*. In the manufactured article, and before the clasp has been applied to the umbrella, these serrated teeth *d d* and scallops *d′ d′* are not turned down, but project out vertically on the opposite faces of the clasp D. The clasp thus formed is applied to the umbrella or parasol frame in the following manner: It is slipped on the rod or staff and down over the brace-rods *c c*. The scallops *d′ d′* are then turned down on the face of the collar C, and the serrated teeth *d d* down between the brace-rods, as clearly shown in Fig. 2. Instead of the form of clasp or sleeve, as described, such

a one as shown in Fig. 6 may be used, and which is admirably adapted for light sun-umbrellas and parasols.

The operation is as follows: The umbrella in its folded form is shown in Fig. 2, and by reference to which it will be seen how completely it covers the rough joints formed by the wire attachment of the brace-rods *c c* to the collar C. This effectually prevents the cutting or fraying of the cover by these joints, and, besides, the clasp D extends sufficiently far over the surface of the brace-rods as to grasp and retain them in a compact bundle. This prevents all lateral swinging and vibration of the rods and ribs, and saves all the joints from the effect of this most destructive movement. To raise the umbrella, you have simply to slide the clasp back so as to allow the runner C′ to work in the usual manner. The umbrella is then raised, the runner C′ passing over and being retained by the spring-catch A′. In this position the ratchet-teeth *d d* form close socket-bearings for the brace-rods, strengthening them, as clearly shown in Fig. 1.

When the modification shown in Fig. 6 is used, shoulders b^2 b^2 may be formed on the ribs to prevent the slide passing a given point.

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters Patent of the United States, is—

The sliding clasp D, when constructed and applied to an umbrella or parasol frame so as to operate substantially as described.

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

EDWD. P. JONES.

Witnesses:
JOS. T. K. PLANT,
EDWIN JAMES.