

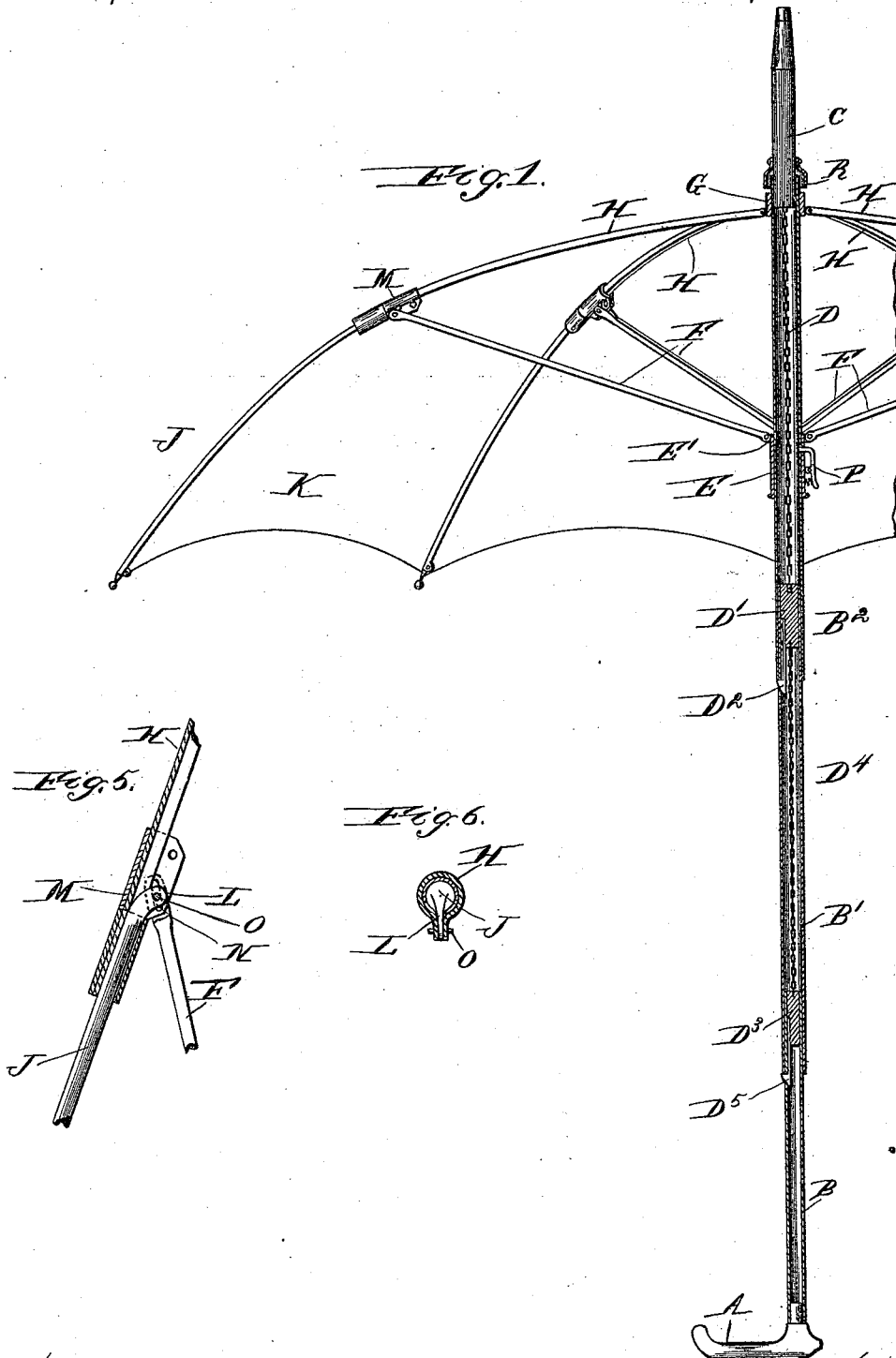
(No Model.)

2 Sheets—Sheet 1.

E. C. PHILLIPS.  
FOLDING UMBRELLA.

No. 492,048.

Patented Feb. 21, 1893.



Witnesses:  
Wm. M. Rheem.  
Wm. L. Fleming

Inventor:  
Edward C. Phillips  
By James W. Parker, atty.

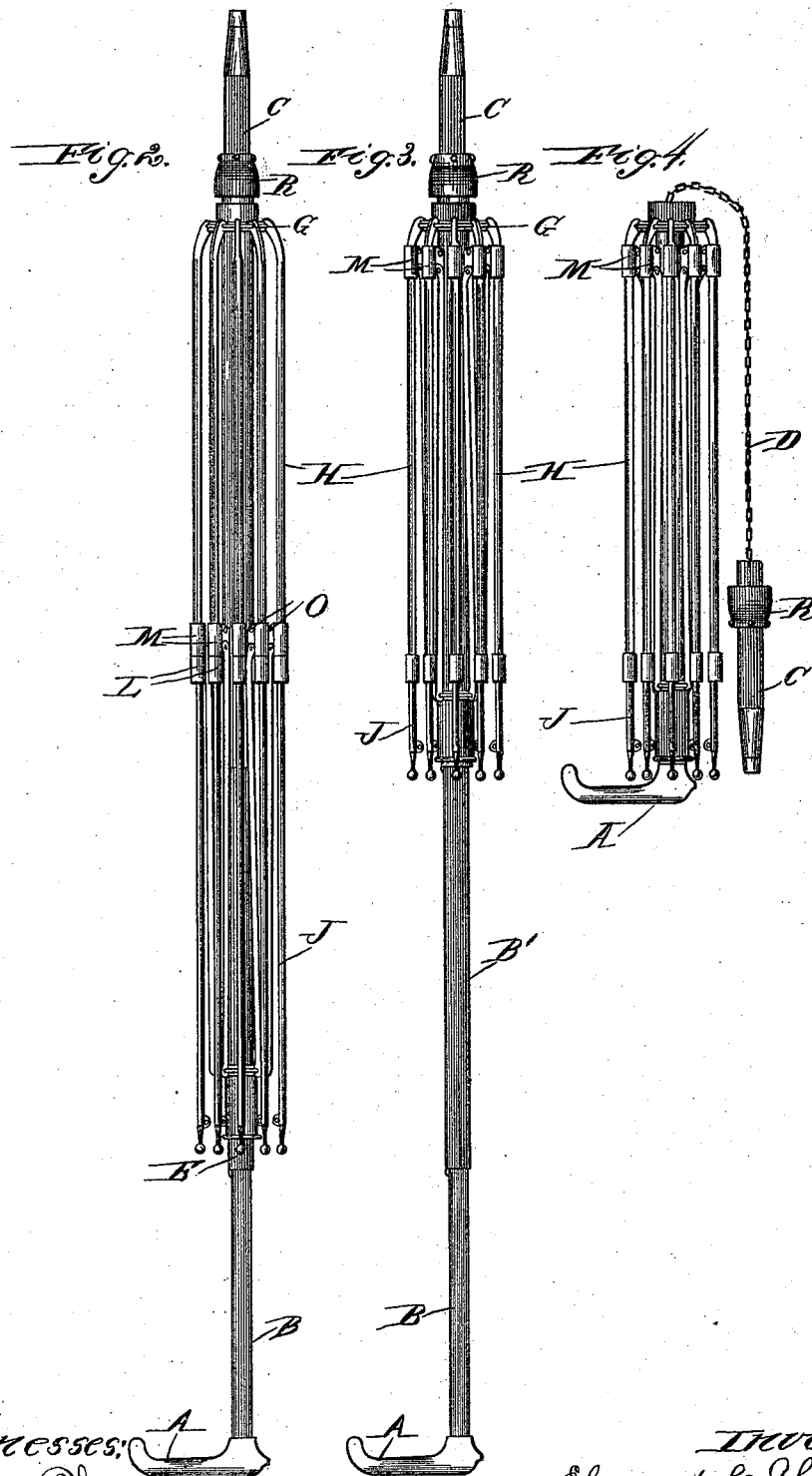
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FOLDING UMBRELLA.

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Witnesses:  
Wm. M. Rheem  
Wm. F. Huming

Inventor:  
Elwood C. Phillips  
By Francis M. Parker

# UNITED STATES PATENT OFFICE.

ELWOOD C. PHILLIPS, OF CHICAGO, ILLINOIS, ASSIGNOR OF TWO-THIRDS TO  
ALBERT J. STONE AND WILLIS W. CARLAND, OF SAME PLACE.

## FOLDING UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 492,048, dated February 21, 1893.

Application filed September 29, 1892. Serial No. 447,301. (No model.)

*To all whom it may concern:*

Be it known that I, ELWOOD C. PHILLIPS, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented a new and useful Improvement in Folding Umbrellas, of which the following is a specification.

My invention relates to folding umbrellas and has for its object to provide convenient and simple means whereby an umbrella of substantially the usual dimensions may be easily collapsed and folded into a small package. It is illustrated in the accompanying drawings, wherein:

Figure 1, is a cross section through the umbrella extended. Fig. 2, is a view of the umbrella frame folded in the usual manner for serving as a walking stick. Fig. 3, is a similar view, with the device partly folded. Fig. 4, is a view with the parts completely collapsed or folded. Figs. 5 and 6, are details of the rib connection with stretcher.

In Figs. 2, 3, and 4 the cover is removed.

Like parts are indicated by the same letter in all the figures.

A is the handle.

B, B', B<sup>2</sup> are the several telescopic tubular portions of the stick.

C is the removable end. D is a chain connecting this removable end with the plug D' provided with the spring clip D<sup>2</sup>, adapted to project through an aperture or slot in the side of the telescopic portion B' so as to engage the lower end of the portion B<sup>2</sup>. D<sup>3</sup> is a similar plug or part to which the portion B of the stick is secured and which is connected by the chain D<sup>4</sup> with the plug D' and carries the clip D<sup>5</sup>, which projects through a slot in the part B and engages the lower end of the part B'.

E is a sliding sleeve having the notch E' at its upper end, to which the stretchers F F are secured at their inner ends in the usual manner.

G is a notch toward the upper end of the stick, to which the upper ends of the sections H H of the ribs are secured in the usual manner. These upper sections are preferably shaped as shown, or U-shaped, or semi-cylindrical in cross-section.

J J are the lower rod-shaped portions of the ribs adapted to slide in or telescope with the upper portions H. This rod portion J is se-

cured at its outer end to the cover K, and its upper end is outwardly bent at L and perforated. This upper outwardly bent perforated end is secured to the connection piece M, which surrounds the part H and is provided with the slot N and is secured to the portion L of the rod J by means of the pin O which passes through both aperture and slot.

P is a spring lock on the thimble E.

R is a cap about the lower end of the removable tip C and which covers the notch G when the parts are in position.

The slot N permits the stretcher to have a slight vertical motion so as to cramp and thus clamp the two portions of the rib together.

The use and operation of my invention are as follows: The umbrella, as indicated in Fig. 1, is in complete position for use. If, now, the umbrella is to be lowered so as to be used as a walking stick, it is only necessary to press upon the lock P so as to release it and move the thimble downwardly in the usual manner until the umbrella is closed into the position indicated in Fig. 2, where the parts may be held by a belt or elastic, as ordinarily used. In this condition the umbrella is ready for use as a walking stick, the thimble E being locked down into its proper position, if desired, in the usual manner.

Now if it is desired to fold up the umbrella so that it may be carried in the pocket or in a grip, the user will first grasp the rod portions J while they are in the position indicated in Fig. 2, release the thimble E and push the thimble and portions J downwardly toward the end of the stick, the parts J J sliding in or telescoping with the parts H H of the ribs. This is freely accomplished, since the stretchers F F, under these circumstances lie parallel with the ribs H and rods J. This will bring the umbrella into the condition shown in Fig. 3. By loosening the catch D<sup>5</sup>, the lower portion of the stick may be forced in, thus releasing the strain on the chain D<sup>4</sup>, and by releasing the hook D<sup>2</sup> the parts may be further telescoped until the part B and the plugs D<sup>3</sup> and D' will extend through to near the end of the part B<sup>2</sup> and force the tip or end C out so that it can be brought around and the parts will assume the position shown in Fig. 4. To restore the umbrella to the condition for use, it

is only necessary to pull upwardly on the handle A, which will by means of the chains and plugs successively bring the parts to the position indicated in Fig. 2, all of the parts  
5 being brought into their normal positions. The user may then pull on the rods J toward the handle until the parts assume the position shown in Fig. 2. The umbrella may then be raised in the usual manner; the action of  
10 raising is of course proceeded with when the rods J are free to swing outwardly, or so that the parts assume a slight angle to each other, as indicated in Fig. 5. In this position the pressure applied endwise to the stretcher F  
15 engages the outwardly bent end L of the rod J and thus tends to cramp the rod in the portion H of the rib and prevent it from sliding or telescoping therein. The parts remain in this cramped position when the umbrella is  
20 extended as shown in Fig. 1, and thus the parts are prevented from sliding upon each other.

Many changes could be made in my invention without departing from the spirit thereof, and certain features could be utilized without the employment of the others, and I do  
25 not wish to be limited, therefore, to the specific devices or the joint use of all the features which are embraced in my invention.

I claim—

In a folding umbrella the combination of an upper rib portion, with a lower rib portion adapted to slide therealong, an outwardly  
30 turned end on such lower portion, a slide on the upper portion, the end provided with a hole, the slide with a slot, and a stretcher secured by a pin passing through such hole and  
35 slot so as to cramp the two parts of the ribs together when the stretcher is moved, unless the stretcher be practically parallel.

ELWOOD C. PHILLIPS.

Witnesses.

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WALTER J. GUNTHERP.