(No Model.)

# A. L. BRICE.

## COMBINED UMBRELLA AND CANE.

No. 448,203. Patented Mar. 17, 1891.

*Fig. 3.*

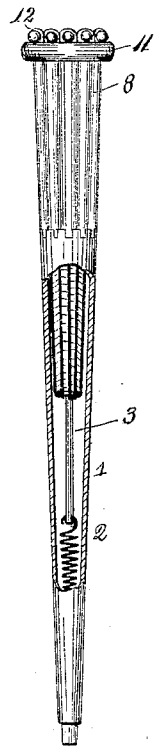



*Fig. 4.*

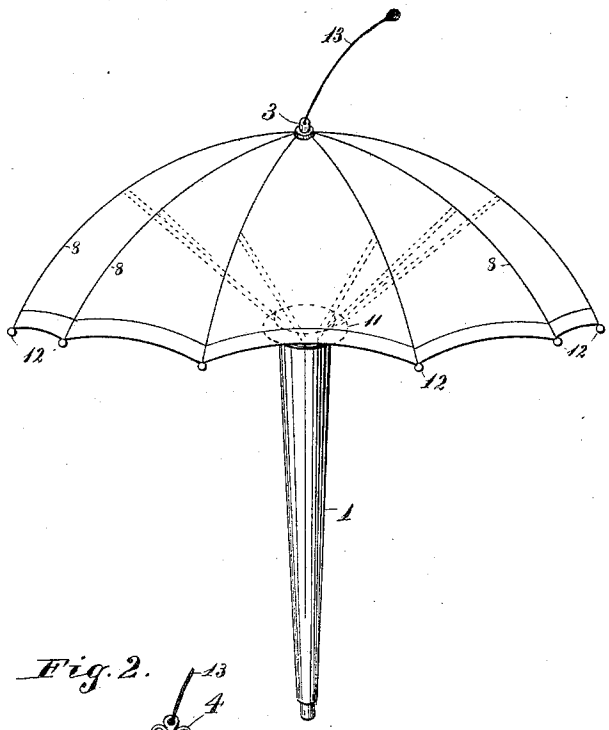
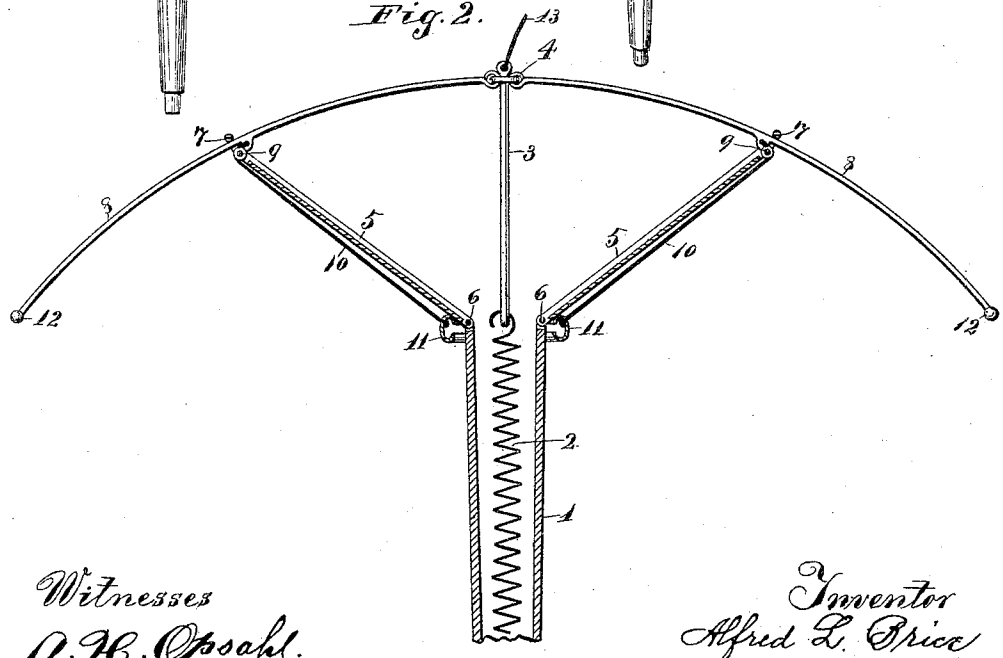



*Fig. 2.*




Witnesses
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Frank D. Merchant

Inventor
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By his Attorneys
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

ALFRED L. BRICE, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-HALF TO FERRIS M. WHITE, OF SAME PLACE.

## COMBINED UMBRELLA AND CANE.

SPECIFICATION forming part of Letters Patent No. 448,203, dated March 17, 1891.

Application filed April 7, 1890. Serial No. 346,975. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED L. BRICE, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in a Combined Umbrella and Cane; 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.

My invention has for its object to provide a combined or a convertible umbrella of a simple construction. With this end in view I construct a tubular staff or barrel equipped at its lower end with the usual plug or ferrule for engagement with the ground or pavement. Secured within the lower end of the tubular barrel is a spring of considerable tension, connected at its upper end to a rod attached to the eye uniting the ribs of the umbrella.

The stretchers of the umbrella are pivoted at their lower ends to the top of the tubular barrel, and are connected to the ribs at their top by a sliding connection or eye. As is well known, the flexure or bow of the ribs of an umbrella is of considerable stress or power, and this feature may be relied upon to sustain the umbrella when spread against the force of the closing-spring within the barrel. Surrounding the cane, at or near its upper end, is an annulus or ring connected by a series of cords with projections on the under surfaces of the ribs, and on the top of each stretcher is a small grooved roller or pulley.

When it is desired to sheath the umbrella within the barrel, the top of the umbrella is pressed upon sufficiently to overcome the stress of the bows or ribs, when the spring within the barrel will immediately exert its force and cause the bows or ribs and their usual covering to fold within the same. During this action the bows slide inward and downward through the eyes on the tops of the stretchers, and being connected to the cords attached to the annulus pull the same upward against the usual knobs on the ends of the ribs, thus forming a convenient handle to the barrel. When it is desired to spread the umbrella, the ring or ferrule is moved downward, thereby pulling the cords attached to the ribs upward until a tassel attached to the rod of the umbrella is in position to be grasped by the hand, when a sudden pull thereon, aided by the flexure of the bows, will fully expand the umbrella.

In the accompanying drawings, Figure 1 is a perspective view of my invention, the umbrella being spread. Fig. 2 is a vertical longitudinal section thereof; and Fig. 3 is a view, partially in section, of the umbrella folded within the cane.

Like numerals refer to like parts throughout the several views.

1 is the tubular body of the walking stick or cane.

2 is a coiled spring secured near the lower end thereof, and 3 is a rod depending from the eye 4, to which the ribs are connected and attached to the upper end of said spring.

5 5 are the stretchers pivoted at 6 to the top of the barrel, each provided with an eye 7, through which a rib 8 passes.

9 is a small grooved pulley or roller mounted on the end of each stretcher adjacent to the eye thereof, and 10 10 are cords attached to the under side of the ribs passing over the rollers and connected at their lower ends to the sliding ring or ferrule 11.

12 12 are the usual knobs on the lower ends of the ribs or bows 8.

13 is a cord or tassel attached to the top of rod 3.

It should be noted that the eye or ring 4 serves as a common head pivotally connecting together all the ribs at their upper or inner ends, so that the ribs are free to turn inward and upward over this ring as a common center or pivot, also that the ribs are mounted to slide on the upper ends of the stretchers. The device shown for this purpose is the eye 7, through which the outer half of the ribs are free to pass. A lug on the under side of the ribs prevent the same from passing outward through the eye beyond that point and has a convenient place of attachment for the cord 10. It should be further noted that when the umbrella is folded the pivoted stretchers form an extension of the staff, and the annulus 11 serves to bind them together at their upper ends, as well as an enlarged head to the han-

dle of the walking-stick. In other words the pivoted stretchers form part of the sheath or walking-stick. It should be further noted that the staff, ribs, and stretchers without the other parts would make an operative cane and umbrella, the opening and closing in that case being entirely done by hand, also that the automatic closing device might be employed without an opening device consisting of the ring 11 and cords 10, or the latter might be employed without the former. The opening and closing devices are, however, desirable to make a more perfect construction.

Having thus described my invention, what I claim is—

1. A combined umbrella and cane comprising a hollow staff, stretchers pivoted at their lower ends to the upper end of the staff, and ribs for supporting the umbrella-cloth pivotally secured at their inner ends to a common head and having their outer portions mounted to slide on the upper ends of said stretchers, whereby the ribs may be folded together over their common pivotal head and incased by the stretchers and the staff.

2. A combined umbrella and cane comprising a hollow staff, stretchers pivoted at their lower ends to the upper end of said staff, ribs for supporting the umbrella-cloth secured at their inner ends to a common head and having their outer portions mounted to slide on the upper ends of said stretcher, and a folding-spring secured within the said staff and connected to the said pivotal head, substantially as and for the purpose described.

3. The combination, with the hollow staff, of the stretchers pivoted thereto, the ribs pivotally secured together by the common head and mounted to slide on said stretchers, an annulus loosely mounted on the staff, and flexible connections extending from the ribs to said annulus over the outer end of said stretchers, substantially as and for the purpose specified.

4. The combination, with the hollow staff, of the stretchers pivoted thereto, the ribs pivotally secured together by a common head and mounted to slide on said stretchers, the closing-spring within the staff and connected to said pivotal head, the annulus on the staff, and the flexible connections extending from the same over the heads of the stretchers to the ribs, substantially as described.

5. The combination, with the hollow staff, of the stretchers pivoted thereto, provided with eyelets and rollers at their outer ends, the ribs pivotally secured to a common head and mounted to slide through said eyelets, the closing-spring within the case connected to said common head, the annulus on the staff, and the flexible connections extending from the same over said sheaves to said ribs, substantially as described.

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

ALFRED L. BRICE.

Witnesses:
A. H. OPSAHL,
WM. H. BLODGETT.