

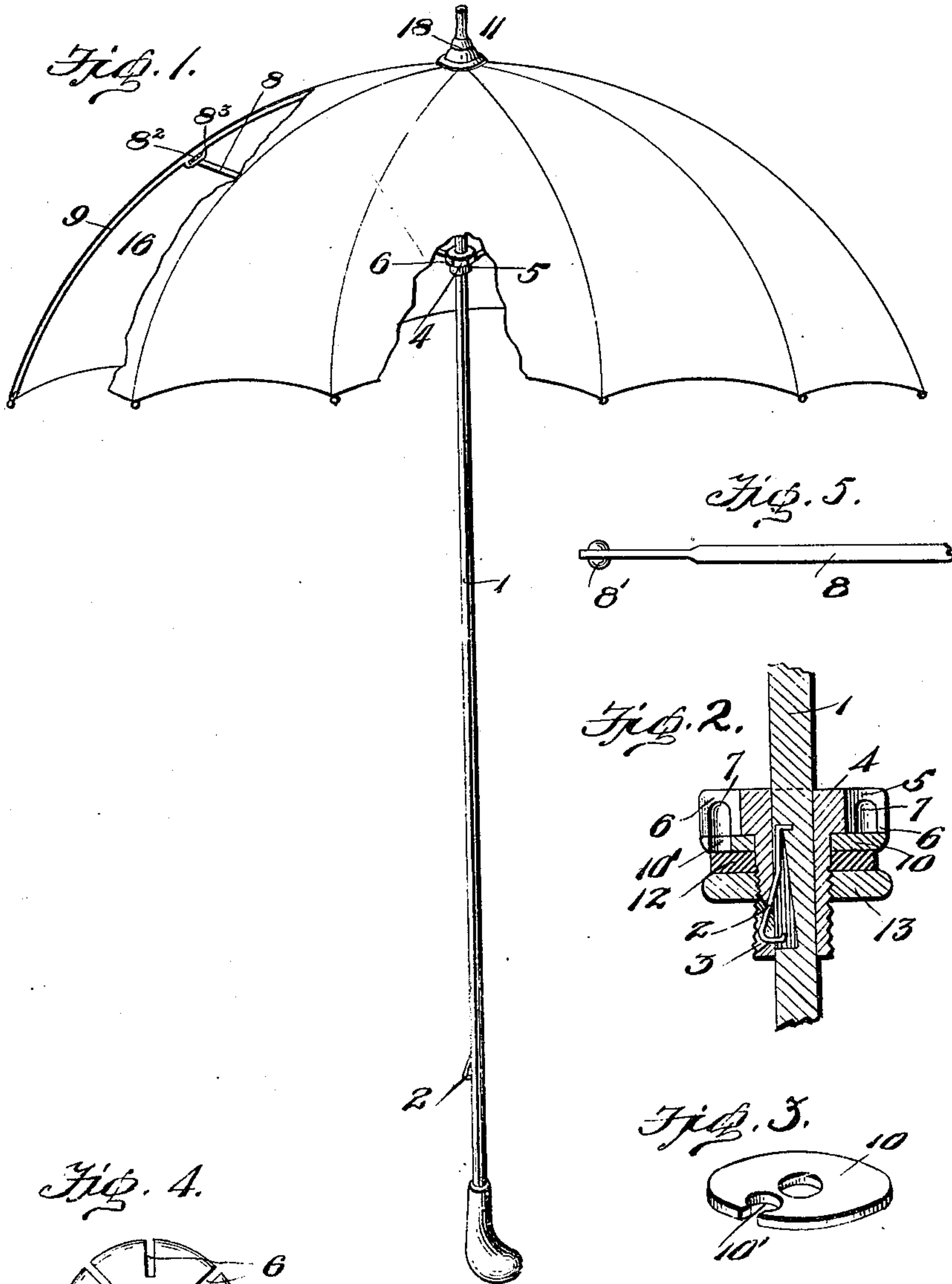
No. 672,084.

Patented Apr. 16, 1901.

D. B. SIMPSON.
UMBRELLA NOTCH.

(Application filed Oct. 28, 1899.)

No Model.)



Witnesses
E. H. Smith
D. B. Simpson

Inventor
D. B. Simpson
By
A. B. W. W. W. W. W.
Attorneys

UNITED STATES PATENT OFFICE.

DANIEL B. SIMPSON, OF MOUNT STERLING, KENTUCKY.

UMBRELLA-NOTCH.

SPECIFICATION forming part of Letters Patent No. 672,084, dated April 16, 1901.

Application filed October 28, 1899. Serial No. 735,074. (No model.)

To all whom it may concern:

Be it known that I, DANIEL B. SIMPSON, a citizen of the United States, residing at Mount Sterling, in the county of Montgomery and State of Kentucky, have invented certain new and useful Improvements in Umbrellas; and I do 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.

The invention relates to improvements in umbrellas and parasols, and more particularly to the runners thereof.

The object of the invention is to provide a runner which shall be simple of construction, durable in use, comparatively inexpensive of production, and by means of which a damaged or broken brace may be easily and quickly removed therefrom without disturbing the other braces.

With this object in view the invention consists in certain novel features of construction and combination of parts, which will be hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a perspective view of my improved umbrella in its raised position with portions of the cover broken away to more clearly illustrate the nature of my invention. Fig. 2 is a sectional view of the runner. Fig. 3 is a perspective view of the runner-guard. Fig. 4 is a top plan view of the runner, and Fig. 5 is a detailed view of the inner end of one of the braces.

Referring to said drawings, 1 denotes a stick or handle which is provided with a thumb-spring 2.

The runner 4 is formed with a head 5, which is provided with vertically-disposed radial slots 6, arranged at equidistant points in its periphery, said slots terminating in pockets 7, which are adapted to receive the ball-bearing ends 8' of the braces 8. The slots extend vertically entirely through the head, or, in other words, have no end walls. Formed integral with the head is a depending exteriorly-screw-threaded sleeve provided with an aperture 3 to receive the thumb-spring 2.

10 denotes an annular guard which encompasses the runner-sleeve and abuts against the lower face of the cap to close the pockets and retain the ends of the braces in the cap.

12 denotes a rubber washer which is held against the guard by a nut 13, which has a threaded engagement with the runner-sleeve. 55

The guard 10 is provided with a recess 10', which is normally alined with the slotted portion of the cap between the pockets; but when it is desired to remove one of the braces the guard is rotated on its axis about the sleeve until the recess is alined with the pocket containing the particular brace which it is desired to remove, so that the swelled head of the brace may be dropped down out of the pocket through said recess and thereupon may be detached from the runner without disturbing or in any way affecting the other braces. 60 65

The function of the elastic washer is to allow the guard-disk to have a limited independent play on the sleeve of the runner to compensate for the movement of the bearings in the pockets when the braces fold and unfold in the operation of opening and closing the umbrella, also to hold said bearings in their proper relative positions and compensate for wear and prevent rattling of the parts. The washer, furthermore, acts as a cushion to prevent breakage of the rib ends when subjected to casual extraneous blows or shocks. 70 75 80

Having thus fully described my invention, what is claimed as new, and desired to be protected by Letters Patent, is—

1. A runner for an umbrella or parasol, comprising a head 4 formed with radial vertically-disposed endless slots in its periphery, said slots terminating in pockets and said head formed with a depending vertical exteriorly-screw-threaded sleeve having an aperture adapted to engage the usual thumb spring or catch of an umbrella-stick, an annular guard mounted upon the sleeve beneath its head and above the screw-threaded surface of the sleeve and formed with a notch or opening in its periphery adapted to be brought into alinement with the pockets of the head, a nut engaged with the screw-threaded end of said sleeve, and an elastic washer interposed between the nut and the guard, substantially as set forth. 85 90 95 100

2. In an umbrella or parasol, a runner comprising a head having a series of radial slots terminating in pockets and an externally-threaded, pendent sleeve, braces having ball-

bearing ends movable in said slots and journaled in said pockets, a notched guard, a nut arranged on the stem below the guard, and a yielding device clamped between the nut and guard to yieldingly maintain the latter in position, substantially as set forth.

3. In an umbrella or parasol, a runner comprising a head having radial slots terminating in pockets and a pendent sleeve, braces having ball-bearing ends movable in said slots and journaled in said pockets, a notched guard on said sleeve and adapted to maintain the ends of the braces in position, an elastic washer bearing against the under side of the guard to yieldingly retain the same in place, and means for holding the washer in position, substantially as set forth.

4. In an umbrella or parasol, a runner comprising a head and an externally-threaded, pendent sleeve, said head having radial slots terminating in pockets, braces provided with ball-bearing ends movable in said slots and journaled in said pockets, a notched guard-plate arranged on the stem and adapted to bear on the under side of the head to retain the ends of the braces in position, a nut on the stem and an elastic washer clamped between the nut and guard-plate and yieldingly

retaining the latter in place, whereby the guard-plate is permitted to have a limited independent yielding movement to compensate for the play of the brace ends and a cushion is provided to prevent casual breaking of the brace ends, substantially as set forth.

5. In an umbrella or parasol, a runner having a head and a sleeve, said head provided with radial slots terminating in pockets, braces having ball-bearing ends movable in said slots and journaled in said pockets, a notched guard on said sleeve and adapted to maintain the ends of the braces in position, a clamping device connected to the sleeve below the guard, and a yielding device between said clamping device and guard to yieldingly maintain the latter in position and in frictional engagement with the brace ends, and acting as a common tension device for all of said brace ends, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

DANIEL B. SIMPSON.

Witnesses:

THOS. D. JONES,
JACK. STEWART.