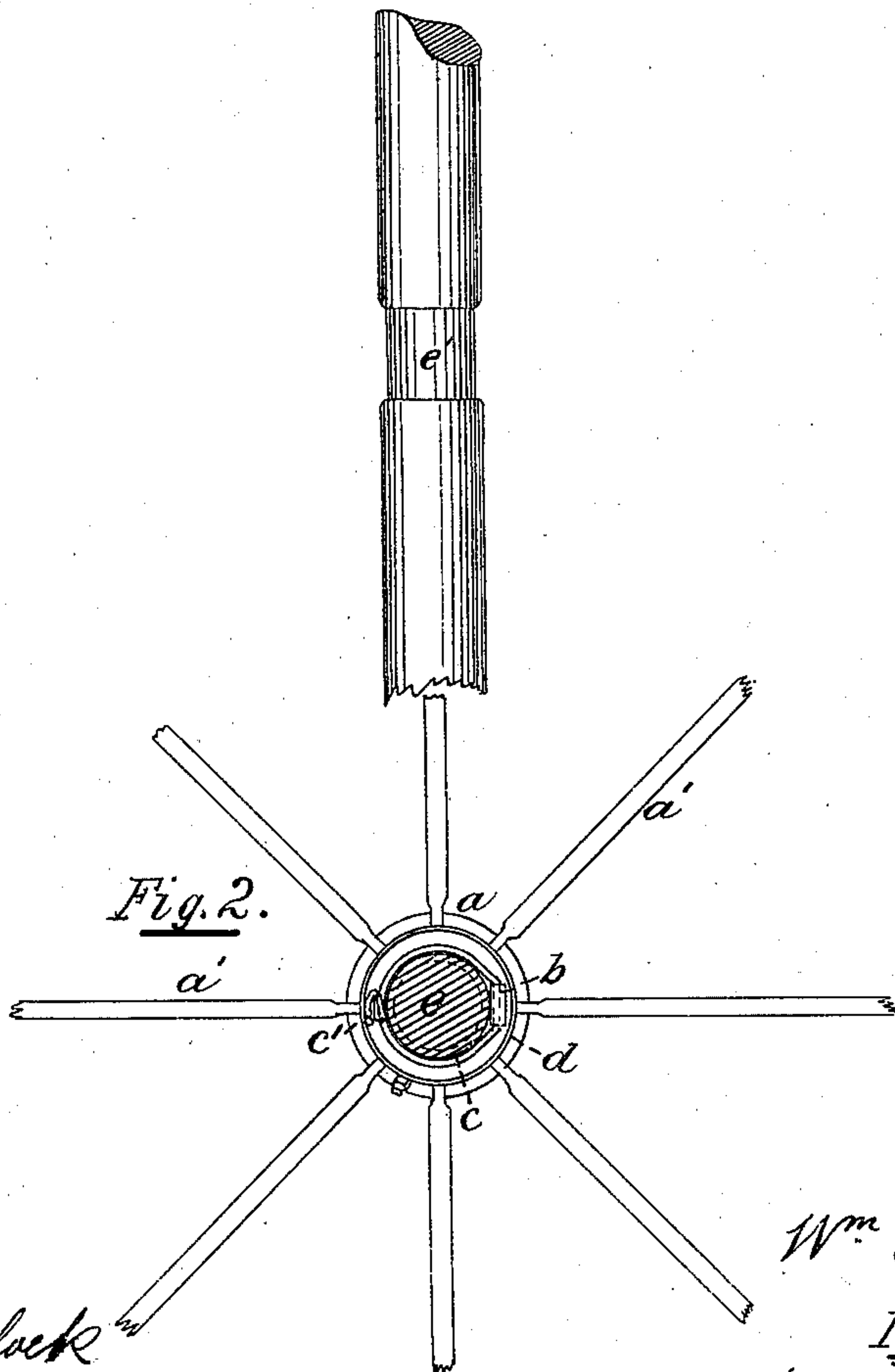
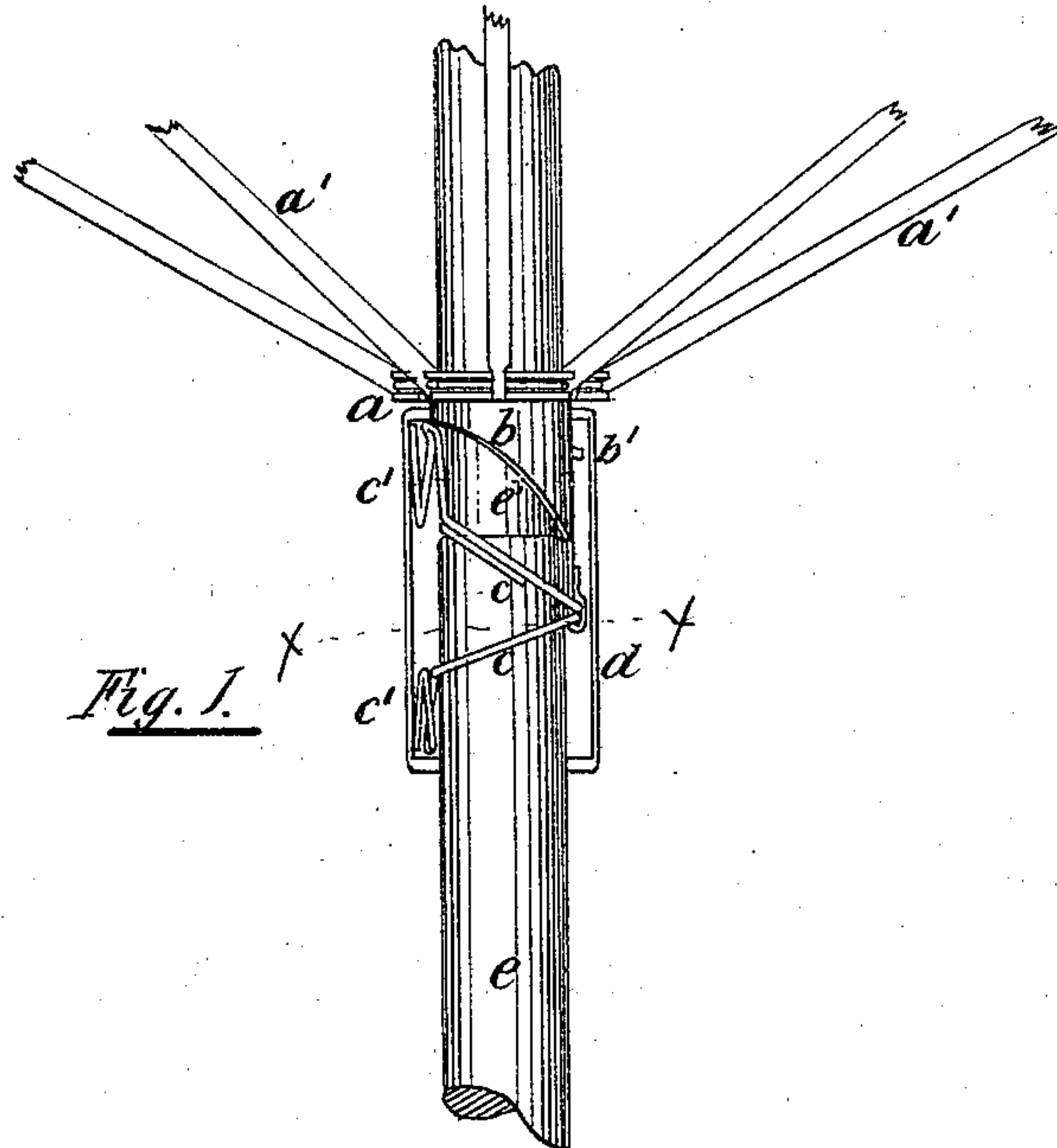


W. P. FERGUSON.  
 UMBRELLA RUNNER.

No. 182,063.

Patented Sept. 12, 1876.



Witnesses.

William Shedlock  
 William H. Hallam

Wm P. Ferguson

Inventor.

per Alfred Shedlock  
 Atty.

# UNITED STATES PATENT OFFICE.

WILLIAM P. FERGUSON, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN UMBRELLA-RUNNERS.

Specification forming part of Letters Patent No. 182,063, dated September 12, 1876; application filed February 17, 1876.

*To all whom it may concern:*

Be it known that I, W. P. FERGUSON, of Brooklyn, Kings county, State of New York, have invented certain new and useful Improvements in Umbrella-Runners, of which the following is a specification:

This invention relates to an improved retaining device for umbrella-runners; and it consists of two rings surrounding the stick, which are secured to the runners proper in such a manner that they are free to move, so as to be pressed into notches cut in the stick by means of springs which form a part of the rings, or are separate therefrom, said springs bearing against an outside case surrounding the runner. When a ring is in one of the notches in the stick it stands at an angle to the axis of it, and consequently the more force applied to the side which is attached to the runner the greater the gripe of the ring on the stick will be. The ring is released from the stick by the flanged end of the outside case bearing against the part of the ring which is in the notch, when the case is caused to slide on the runner, thus leaving the runner free to move.

But to describe my invention more particularly, I will refer to the accompanying drawings forming part of this specification, which show one of the various ways in which rings attached to the runner may be made to retain the same in position by falling into notches or depressions made in the stick.

Figure 1 is an elevation showing the outside case in section. Fig. 2 is a transverse section cut through the line *x x*, looking from beneath.

*a* is the notched ring, having the ribs *a' a'* attached thereto. From the under side of it drops the piece *b*, which only partly surrounds the stick. The rings *c c* pass on the outside of the lower end of the piece *b*, which is bent over them and riveted or soldered to itself, thus securely holding the rings in place, but leaving them free to move. Each ring is bent

from a single piece of wire, one end of it being bent in the form of a spring, as shown at *c*. The other end is soldered to the ring after the wire is bent round the stick. The outside case *d* is made with inside flanges at its ends, the upper one fitting over the part *b* of the runner, and the lower one over the stick *e*. The springs *c' c'* of the rings *c c* bear against the inside of the case *d*, so that as the runner is pushed up or pulled down on the stick *e* one of the rings *c* is pressed into one of the reduced portions or notches *e' e'*, said notches being made as shown. The rings are forced out of the notches by the flanges on the case *d* pressing against the springs *c' c'*. To prevent the case being pulled down too far, the piece *b* of the runner has a little projection, *b'*, thrown up from the side of it, against which the upper flange of the case comes in contact.

Instead of the two rings, as just described, one ring fastened to the runner may be used, the outside case also being done away with. The ring could then be moved out of the upper notch by the fingers, and the runner being pulled down, it would be moved into the position occupied by the lower ring so as to catch in the lower notch.

What I claim, and desire to secure by Letters Patent, is—

1. An umbrella-runner, having a ring or rings, *c c*, provided with springs *c' c'*, fastened at one side to the plate *b*, projecting downward from the notched ring *a*, and arranged to catch in notches *e' e'*, substantially as hereinbefore set forth.

2. The combination of the notched ring *a*, the rings *c c*, provided with springs, the stick *e*, with the notches *e' e'* formed therein, and the outside sliding case *d*, all constructed to operate substantially as hereinbefore set forth.

WM. P. FERGUSON.

Witnesses:

WILLIAM SHEDLOCK,  
ALFRED SHEDLOCK.