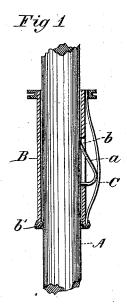
## H. S. FROST.

UMBRELLA RUNNER.

No. 184,204.

Patented Nov. 7, 1876.



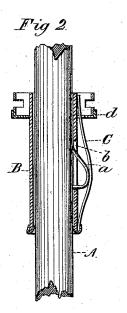


Fig 3.



Witnesses; Larry O, Clark Mamu Hallings

Inventor.

Henry S. Frost, by HUGeadle Hea Attys.

## UNITED STATES PATENT OFFICE

HENRY S. FROST, OF WATERTOWN, CONNECTICUT, ASSIGNOR TO A. N. WOOLSON, OF SAME PLACE.

## IMPROVEMENT IN UMBRELLA-RUNNERS.

Specification forming part of Letters Patent No. 184,204, dated November 7, 1876; application filed November 4, 1875.

To all whom it may concern:

Be it known that I, HENRY S. FROST, of Watertown, in the county of Litchfield and State of Connecticut, have invented a new and useful Improvement in Umbrella Runners; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention consists in providing a runner of any proper construction with an auxiliary spring-plate, located over the usual longitudinal slot, which is adapted, by means of its construction and location, to depress the holding-spring of the umbrella-stick when properly operated, for the purpose of disengaging the runner, so that it may be moved.

In the drawings, Figure 1 represents a sectional elevation of my improved runner, with the fixed end of the spring-plate caught by the re-enforcing ring at the end of the runner, while its loose end is held by a slot in the head; Fig. 2, a similar view, but the loose end of the spring is held by an auxiliary ring attached to the cap; and Fig. 3, a partial side elevation, representing the fixed end of the spring-plate secured by a rivet.

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

A represents an umbrella-stick, provided with the holding-spring a. B represents a runner, constructed generally in any proper manner, and of any suitable size, but essentially provided with an auxiliary plate, C, cov-

ering the usual longitudinal slot b, which is so attached to the runner as to move freely in a lateral direction for the purpose of properly operating the holding-spring of the umbrellastick. This plate is made of elastic metal, and is rigidly secured at one end, but loosely held at the other, so that when operated it will have an elastic vibration.

The end which is fixed may be secured to the runner by a rivet, as shown in Fig. 3, or by being caught beneath the edge of the reenforcing ring b', as shown in Figs. 1 and 2. The end which is loose is held in a slot, which may be formed in the head itself, as shown in Fig. 1, or in an auxiliary ring secured to the head, as shown in Fig. 2.

By means of the construction described a plate is interposed between the thumb and holding-spring of the stick, so that the latter may be depressed when it is desired to raise or lower the umbrella with more ease and comfort than when the thumb rests directly upon the spring.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A runner having a longitudinal slot and a vibrating spring-plate, the latter being fixed at one end, but loosely held at the other, substantially as described.

This specification signed and witnessed this 22d day of October, 1875.

HENRY S. FROST.

Witnesses:

TRUMAN P. BALDWIN, LEMAN W. CUTLER.