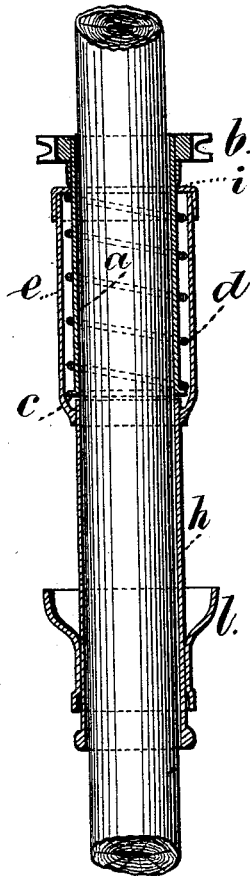


F. S. BROWN.  
UMBRELLA-RUNNER.

No. 187,998.

Patented March 6, 1877.



Witnesses

Chas. H. Smith  
Harold Serrell

Inventor

Felix S. Brown

per Lemuel W. Serrell

att'y.

# UNITED STATES PATENT OFFICE.

FELIX S. BROWN, OF JERSEY CITY, NEW JERSEY.

## IMPROVEMENT IN UMBRELLA-RUNNERS.

Specification forming part of Letters Patent No. **187,998**, dated March 6, 1877; application filed October 23, 1875.

*To all whom it may concern:*

Be it known that I, FELIX S. BROWN, of Jersey City, in the county of Hudson and State of New Jersey, have invented an Improvement in Umbrella-Runners, of which the following is a specification:

Runners for umbrellas have been made with a tip-cup upon a prolongation of the runner-tube, as in the United States Patent No. 29,721 of 1860, and English Patent No. 2,400 of 1867, and No. 316 of 1871.

My invention is made for securing and retaining the spring in a position where it does not increase the size of the runner as a whole, and for inclosing that spring.

In the drawing I have shown my improvement by a vertical section.

The runner-tube *a*, and its notch or crown *b* for the umbrella-stretchers, is of ordinary construction, except that its end is flanged at *c* sufficiently for one end of the helical spring *d* to rest against, and around this spring is the case *e*, with its inward flange *i* for the other end of the spring *d*. This case *e* is made with, or connected to, the tube *h*, that is of a size corresponding to the tube *a*, so as to slide freely upon the handle, and this tube *h* receives upon it the tip cup *l*. The length between the notch-ring *b* and the tip-cup is such as to correspond to the parts of the umbrella

when closed, so that the tip-cup and its tube *h* are drawn back against the spring, and the spring holds the tip-cup to the tips when they are entered therein.

By this construction the spring is between the runner-head and the tip-cup, in a space that is usually unoccupied, and there is no change required in the runner. Furthermore, the tip-cup and its tube *h* are smaller and more neat and compact than in those tip-cups containing a spring between the tube of the tip-cup and the runner-tube, as in said Patent No. 2,400. Besides this, the tip-cup can be moved along upon its tube *h*, so as to position it correctly in respect to the other parts of the umbrella before it is soldered or otherwise attached in place.

I claim as my invention—

In a combined runner and tip-cup, the tube *h*, of the same size, or nearly so, as the runner-tube *a*, and the cylinder *e*, surrounding the spring, and connected to the tube *h*, for the purposes and as set forth.

Signed by me this 26th day of October, A. D. 1875.

FELIX S. BROWN.

Witnesses:

GEO. T. PINCKNEY,  
CHAS. H. SMITH.