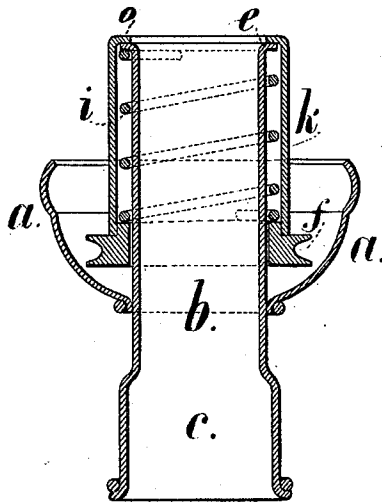


F. S. BROWN.
UMBRELLA TIP CUP.

No. 177,198.

Patented May 9, 1876.



Witnesses,

Chas. H. Smith
Harold Smith

Inventor,

Felix S. Brown.
per Lemuel W. Perrell

Atty.

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN UMBRELLA-TIP CUPS.

Specification forming part of Letters Patent No. **177,198**, dated May 9, 1876; application filed November 1, 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 Tip-Cups for Umbrellas, of which the following is a specification:

In Letters Patent No. 29,721, granted in 1860, a tip-cup is upon the runner-tube, and the notch-ring slides upon that tube and is acted upon by a spring; but there is nothing to guide this ring, and it is liable to be turned into a diagonal position. Besides this, the notch-ring does not pass into the tip-cup.

My invention relates to a runner and tip-cup in which the tip-cup is attached to the sliding tube, and the notch-ring is movable thereon; and the improvement relates to the combination, with the said parts, of a guide-tube to the notch-ring, that serves to maintain a parallelism in the movement of the notch-ring, and at the same time inclose the spring and prevent injury to the same.

In the drawing, this improvement is represented by a vertical section.

The tip-cup *a* is permanently attached to the tube *b*, and said tube *b* is of a size to slide freely upon the stick of the umbrella, and the end of said tube *b* is enlarged, as at *c*, for the twofold purpose of increasing the facility for grasping and moving the tube and tip-cup, and for giving the space that is generally required at the junction of the umbrella-stick

with the ornamental handle, as said handle is usually slightly larger than the stick. The tube *b* extends through the tip-cup, and its upper end terminates with a flange, *e*. The notched ring *f*, that receives the umbrella-stretchers, is upon the tube *k*—that is, of a size to slide freely outside the flange *e*—and there is sufficient space between the tubes *b* and *k* for the spring *i*, that acts between the flange *e* and the notched ring *f*; hence, when in use, this spring will move the tip-cup toward the tips of the ribs, to hold them, and the notched ring *f* will be guided upon the tube *b* by the tube *k*. The inward flange *o*, at the end of the tube *k*, serves to limit the movement of the said tube *k*.

I claim as my invention—

1. The notched ring *f*, attached to the tube *k*, and the spring *i* within the tube *k*, in combination with the tip-cup *a* and tube *b*, as set forth.

2. The combined runner and tip-cup, made with the tip-cup tube of a size to slide upon the stick, and with the end of such tube enlarged, as at *c*, for the purposes and as set forth.

Signed by me this 27th day of October, A. D. 1875.

FELIX S. BROWN.

Witnesses:

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