

G. W. TUCKER.
UMBRELLA-TIP CUP.

No. 172,673.

Patented Jan. 25, 1876.

Fig. 1.

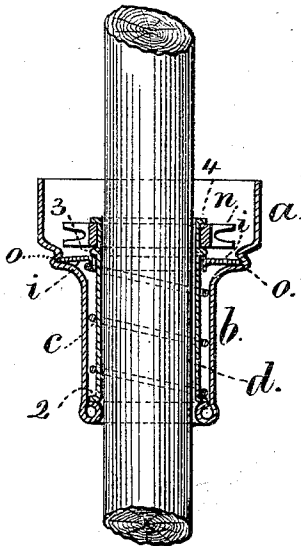
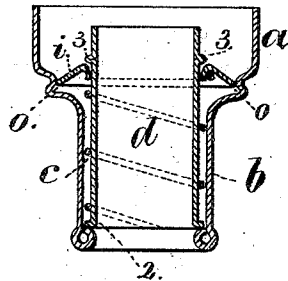


Fig. 2.



Witnesses

*Charles H. Smith
Harold Bennett*

Inventor

George W. Tucker

per L. N. Ferrell

att'y.

UNITED STATES PATENT OFFICE.

GEORGE W. TUCKER, OF WATERBURY, CONNECTICUT, ASSIGNOR TO HIMSELF AND THE AMERICAN RING COMPANY, OF SAME PLACE.

IMPROVEMENT IN UMBRELLA TIP-CUPS.

Specification forming part of Letters Patent No. 172,673, dated January 25, 1876; application filed October 27, 1875.

To all whom it may concern:

Be it known that I, GEORGE W. TUCKER, of Waterbury, in the county of New Haven and State of Connecticut, have invented an Improvement in Umbrella Runners and Tip-Cups, of which the following is a specification:

Tip-cups have been applied to the runner-tube of an umbrella, and a spring has intervened to press the cup toward the tips of the umbrella-ribs. This I do not claim, in view of English patent No. 316, A. D. 1871.

My invention relates to this class of umbrella runners and tip-cups, and relates to the manner of securing the washer to the tip-cup for the spring to act against.

The tip-cup *a* is provided with a cylindrical extension, *b*, that surrounds the spring *c* that is between said cylinder *b* and the runner-tube *d*, and said spring *c* acts between the flanged end 2 of the tube *d*, and the ring *i* within the tip-cup, but instead of this ring *i* being soldered in, as heretofore usual, the said ring is made as the frustum of a hollow cone or dome, as seen in the section, Fig. 2, the base of which is sufficiently small to enter the groove *o* around the bottom of the tip-cup, so that when said ring is pressed out flat the diameter thereof is

sufficiently increased to force the edges firmly into said groove *o* and hold the ring securely against the action of the spring, as seen in the section Fig. 1.

Around the tube *d* a rib, 3, is made, and the said tube is drawn endwise against the action of the spring *c* sufficiently to allow of the tube being grasped by a tool with half-circle jaws entering around such tube *d* and between the rib 3 and the tip-cup.

The notched ring *n* is then placed upon the tube *d* and secured by turning the end of said flange over, as at 4, and compressing the metal, so as to fold the metal at the rib 3, and firmly hold said ring *n*. This avoids soldering, facilitates construction, lessens cost, and makes the spring, tip-cup, and runner more durable and handsome than those before made.

I claim as my invention—

The ring *i* inserted into the groove *o* at the base of the tip-cup, and secured, as specified, in combination with the spring *c* and runner-tube *d*, as set forth.

Signed by me this 25th day of October, 1875.

Witnesses: GEO. W. TUCKER.

H. M. STOCKING,
B. D'AUBIGNÉ.