G. K. JOHNSON, Jr.

UMBRELLA TIP-CUP.

No. 188,297. Patented March 13, 1877.

Fig. 1.

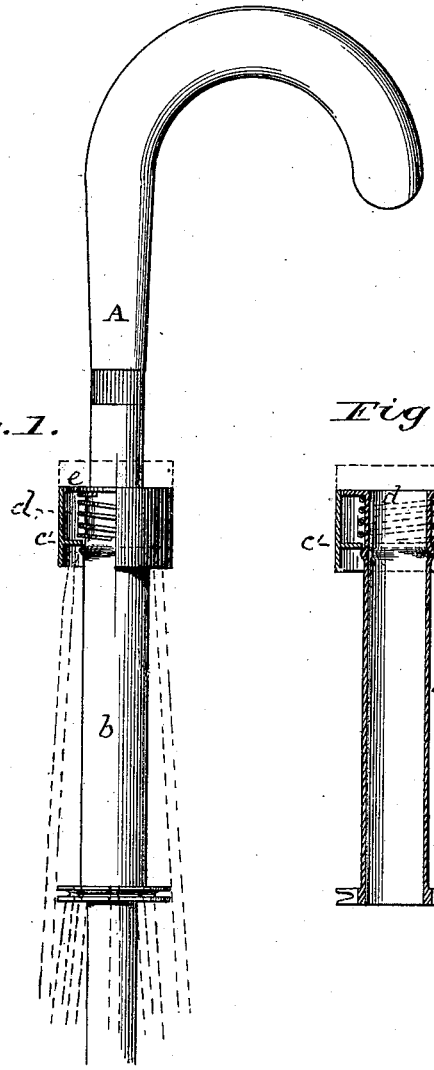


Fig. 2.

Fig. 3.

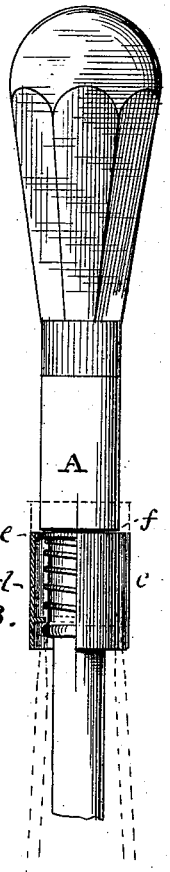
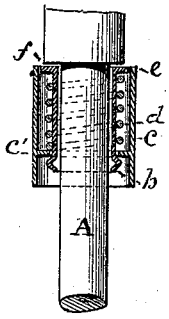


Fig. 4.



Attest:
H. C. Perrine
S. F. Austin

Inventor.
Geo K. Johnson Jr.
By. S. J. Coomber.
Attorney.

UNITED STATES PATENT OFFICE.

GEORGE K. JOHNSON, JR., OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN UMBRELLA-TIP CUPS.

Specification forming part of Letters Patent No. **188,297**, dated March 13, 1877; application filed January 29, 1877.

To all whom it may concern:

Be it known that I, GEORGE K. JOHNSON, Jr., of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Umbrellas and Parasols, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

My improvement relates to a device commonly called "tip-cup" on the umbrella-staff, the office of which is to receive and hold the tips of the ribs when the umbrella is closed.

In the accompanying drawings, Figure 1 is a view of the cup or shell, with its appendages, connected with the runner to which the stretchers are jointed, part of the cup being cut away to show the spring. Fig. 2 is a longitudinal section of the cup and its appendages, connected with the runner. Fig. 3 is a view of the cup and its appendages, made separately from the runner, with a part of the cup cut away; and Fig. 4 is a longitudinal section of the same.

A represents a section of the umbrella-staff; *b*, a cylindrical tube or barrel fitting closely to said staff; *c*, an outer cylinder, which constitutes the cup; *c'*, an annular flange projecting inwardly from said outer cylinder, and *d* a spiral spring in the annular space between the barrel *b* and the cylindrical cup *c*. It will be seen that the barrel *b* has at its lower end a laterally-projecting annular flange, *e*, wide enough to close the annular space between *b* and *c*, but not so wide as to rub or bind against *c* as the latter moves up and down. On closing the umbrella, the cup *c* is drawn down by hand, so as to clear the tips of the ribs, and when fairly closed the cup is released, and the spring automatically forces it up, so that it will embrace and hold said tips. The annular flange *e* at the lower end of the barrel *b* forms a bottom to the cup *c* when the latter is held up by the spring, and the cylindrical form of said cup allows it to be drawn down without coming in contact and rubbing against the staff A, and also allows a shoulder below the barrel *b*, as shown at *f*, Figs. 1, 3, and 4, which is not practicable when the lower end of the cup is contracted to fit closely to the staff, as it has heretofore been commonly made. The spring *d* is not absolutely necessary to the operation of my device, and may be omitted; but it greatly adds to the efficiency of it when used. I do not claim the barrel, the cup, or the spring, nor all of them combined, except when constructed as herein described and shown; but

What I do claim is—

1. The barrel *b*, with its laterally-projecting annular flange *e*, in combination with the cylindrical cup *c*, with its inwardly-projecting flange *c'*, and a spring, *d*, to automatically carry and hold up said cup, all constructed and combined to operate substantially as described and shown.

2. The barrel *b*, with its annular flange *e*, in combination with the cylindrical cup *c*, substantially as described.

GEO. K. JOHNSON, JR.

Witnesses:

S. F. AUSTIN,

JNO. D. PATTEN.