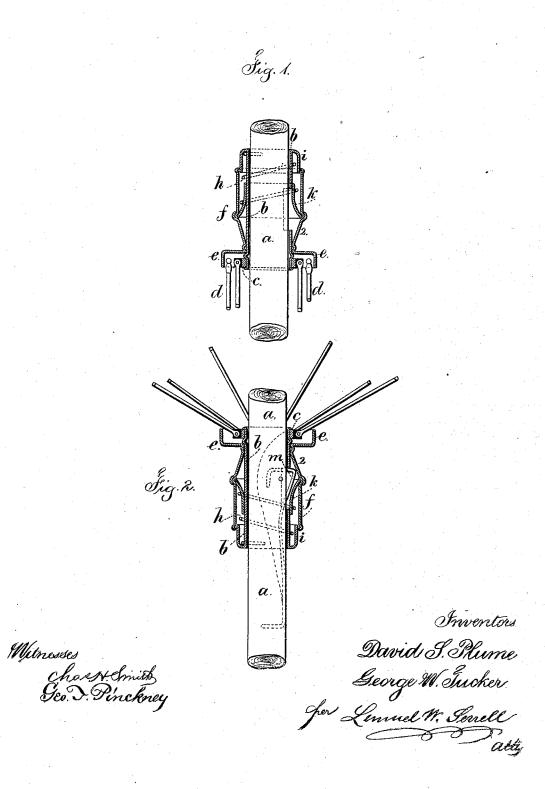
D. S. PLUME & G. W. TUCKER.

UMBRELLA RUNNERS.

No. 182,703.

Patented Sept. 26, 1876.



UNITED STATES PATENT OFFICE

DAVID S. PLUME AND GEORGE W. TUCKER, OF WATERBURY, CONN.

IMPROVEMENT IN UMBRELLA-RUNNERS.

Specification forming part of Letters Patent No. 182,703, dated September 26, 1876; application filed September 17, 1875.

To all whom it may concern:

Be it known that we, DAVID S. PLUME and GEORGE W. TUCKER, of Waterbury, in the county of New Haven and State of Connecticut, have invented an Improvement in Spring Tip-Cup and Runner Combined, for Umbrellas, Parasols, &c., of which the following is a specification:

Umbrella-runners have been made with a double conical slide, that acts to press in the spring-catches upon the handle, and a runner has been made with a spring tip-cup.

Our invention consists of a peculiarly-constructed slide for the tip-cup, whereby said slide is made to operate both the tip-cup and the spring-latch of the handle.

In the drawing, Fig. 1 is a section of our

In the drawing, Fig. 1 is a section of our improved runner, with the tip-cup, as retaining the tips of the ribs in the folded condition of the umbrella, and Fig. 2 is a similar view, inverted, of the parts in the position they assume when the umbrella is open and held up for use.

The handle a of the umbrella is of ordinary character, and the tube b of the runner fits loosely thereon, and is provided with the crown-piece c for the stretchers, and the other parts of the umbrella are of usual character, except that the stretchers are jointed to the ribs at such a place that when the umbrella is closed the ribs d close against the crown-piece c, and the tips or ends of d are contiguous to the said crown and runner, so as to be retained by the tip-cup e that slides upon the runner-tube b.

The tubular slide f of the tip-cup e surrounds the runner-tube b, and it is made conical at 2, and there is a spring, h, that acts between the end piece i of the tube b, and a shield, k, within the slide f, so as to press the tip-cup e toward the crown of the runner.

With our improved tip-cup and runner it is unnecessary to employ a spring to hold the runner when the umbrella is closed, because the tip-cup is drawn back and the tips entered within said cup, and they hold the umbrella closed. When the umbrella is opened the runner and tip-cup are moved along together, and the handle-spring m catches into the opening in the runner-tube b, as seen in Fig. 2. When the conical tube of the tip cup is seized and drawn upon in closing the umbrella the spring h is compressed, and the conical portion 2, coming against the spring-catch m, presses the same back into the handle a and unlatches the runner, so that the umbrella is closed by a continuation of the movement given to the tip-cup and slide, which is very convenient in closing the umbrella.

In cases where a conical auxiliary runner is made use of there is nothing to prevent such auxiliary runner working downward by the motion of the parts in carrying the umbrella, and thereby closing said umbrella by unlatching the spring. With our device the spring that presses against the tip-cup holds the conical slide 2 entirely out of the way of the spring-latch when the umbrella is in use.

We claim as our invention-

The umbrella-runner composed of the tube b, tubular slide f, cone 2, spring h, and tipcup e, substantially as set forth.

Signed by us this 13th day of September, 1875.

D. S. PLUME. G. W. TUCKER.

Witnesses:

H. M. STOCKING, J. S. EASTWOOD.