(No Model.)

J. T. SMITH.

PARASOL OR UMBRELLA.

No. 343,079. Patented June 1, 1886.

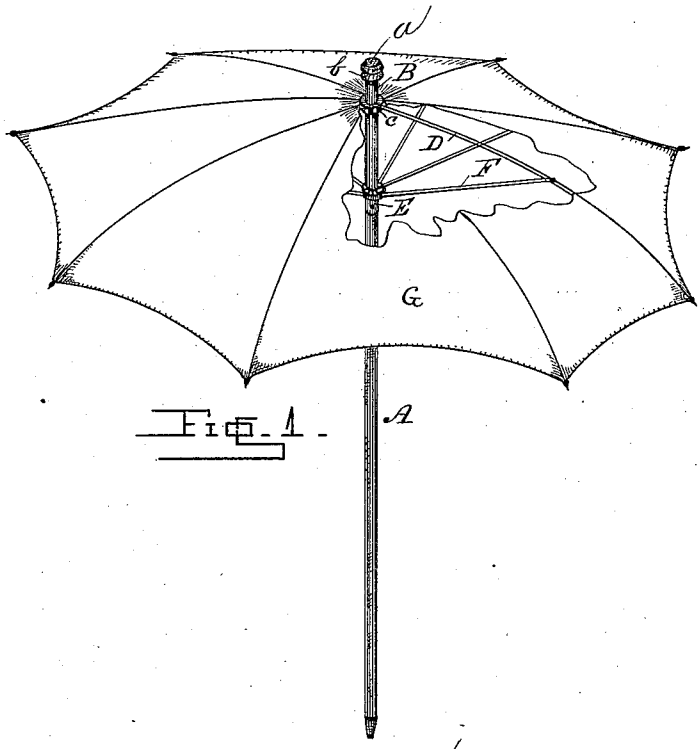


Fig. 1.

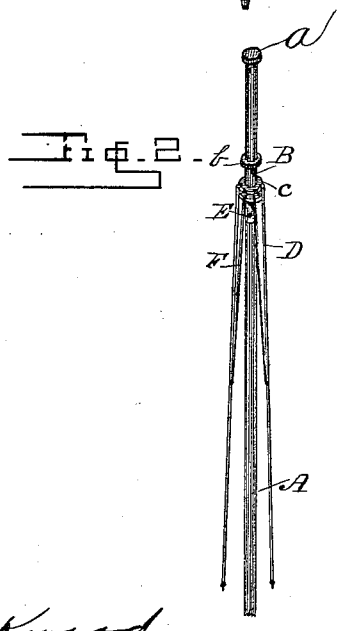


Fig. 2.

WITNESSES

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UNITED STATES PATENT OFFICE.

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PARASOL OR UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 343,079, dated June 1, 1886.

Application filed December 28, 1885. Serial No. 186,905. (No model.)

To all whom it may concern:

Be it known that I, JAMES THOMAS SMITH, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Parasols and Umbrellas; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in parasols or umbrellas of the class described in Patent No. 256,754, granted to me April 18, 1882—that is to say, those which are opened and closed from the outside; and the object of the invention is to dispense with the spring employed to hold the runner in place when the parasol is open.

The invention consists in increasing the length of the stretchers, rearranging the pivotal points of attachment of the stretchers to the ribs, and proportioning the travel of the runner of a parasol or umbrella of the class above stated, so that when the stretchers are moved beyond a horizontal plane the direction of the pressure of the stretchers against the ribs is changed, and the runner is pressed up and held against a knob at the top of the stick by the resiliency alone of the ribs.

In the accompanying drawings, Figure 1 is a perspective view of a parasol or umbrella open or spread, a portion of the cover being broken away. Fig. 2 is a perspective view of the same closed, the cover removed.

B represents the runner, secured to the lower end of which is a rib-supporting notch, C, to which the inner ends of the ribs D are attached. The upper end of the runner is provided with a broad flange, *b*, which serves as a hold for the fingers in raising and lowering the runner upon the stick.

E represents the stretcher-supporting notch, riveted to the stick A.

F represents the stretchers, the inner ends of which are secured to notch E, the outer ends being pivoted to the ribs.

G represents the cover, secured to the frame in the usual manner.

In the class of parasols or umbrellas shown and described in my aforesaid patent the stretchers are much less than half the length of the ribs and are pivoted to the ribs considerably within the center of the circle prescribed by the outer ends thereof, and the rib-supporting notch on the runner has just sufficient travel upon the stick to allow the stretchers to be drawn up to about a horizontal plane, the stretchers being of such length as to raise the ribs without bowing them farther than is necessary to properly spread the cover. As thus constructed, the parasol or umbrella, when open, will not remain in that condition unless held by some device similar to a spring secured in the stick and engaging with the runner.

In carrying out my present invention I make the stretchers about one-half the length of the ribs, and pivot them thereto at about mid-length, as shown in the drawings. The play of the runner upon the stick is so proportioned to the length of the stretchers and their point of attachment to the ribs as that when, in spreading the cover, and when the stretchers are brought into about a horizontal plane, the runner will be a short distance below knob *a*, thus allowing of a further movement of the runner to carry the stretchers beyond the horizontal position. When the stretchers occupy this horizontal position, the maximum outward circumferential pressure of the ribs upon the cover is exerted; but the effect of a further movement of the runner up the stick is to carry slightly inward the outward ends of the stretchers, thus changing the outward direction of the pressure of the stretchers on the ribs to an inner one, so that the resistance afforded by the cover and the resilient action of the ribs is suddenly exerted upon the runner, which thereby is quickly forced down and held against the knob without the aid of a spring or other device for that purpose.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a parasol or umbrella adapted to open and close from the outside, in which the runner is outside and is attached to the ribs, and the stretchers are attached to the notch, and having the travel of the runner, the length of the stretchers, and the pivotal points of attachment of the stretchers to the ribs made and proportioned, substantially as herein described, so as to permit the stretchers to be

moved beyond a horizontal plane, whereby the outward pressure of the stretchers against the ribs is directed against the runner, so that the latter will be pressed up against a knob at the top of the stick outside of the umbrella by the resiliency af the ribs, in the manner and for the purpose stated.

2. In a parasol or umbrella of the class described, having the runner outside of the canopy, the combination, with a stick provided with an outside knob at its upper end, of the notch secured to the stick, stretchers secured to said notch, a runner located between the notch and knob, provided at its upper end with a flange and at its lower end secured to the ribs, and the cover secured to the frame in the usual manner, the stretchers being about half the length of the ribs and pivoted thereto about mid-length, the runner having sufficient play to permit the stretchers being moved beyond a horizontal plane, substantially as described, and for the purpose stated.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES THOMAS SMITH.

Witnesses:
WM. S. MARSH,
JOHN GLOVER.