A. B. KNAPP.

Umbrella-Runners.

No. 196,586 Patented Oct. 30, 1877.

Fig. 1.

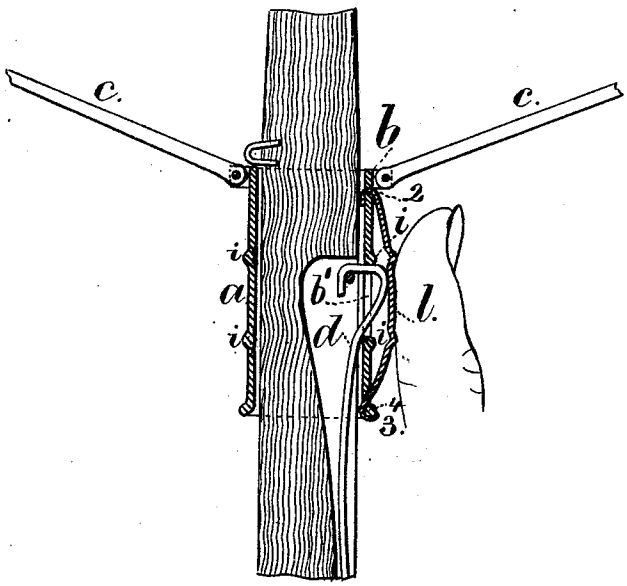


Fig. 4.

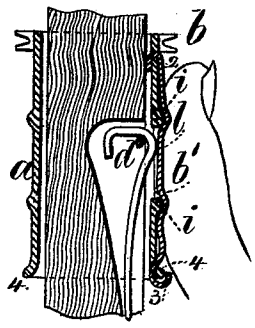


Fig. 2.

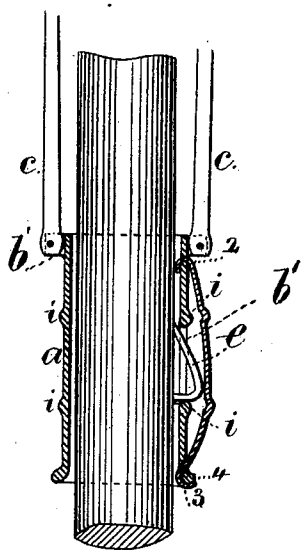
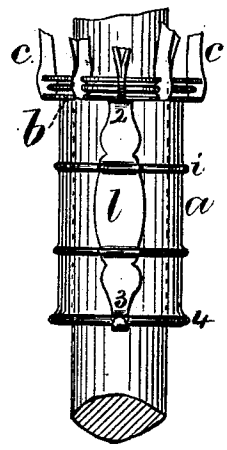


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

ABRAM B. KNAPP, OF ELIZABETH, NEW JERSEY, ASSIGNOR TO ELLIS, KNAPP & CO., OF NEW YORK, N. Y.

IMPROVEMENT IN UMBRELLA-RUNNERS.

Specification forming part of Letters Patent No. **196,586**, dated October 30, 1877; application filed November 27, 1875.

To all whom it may concern:

Be it known that I, ABRAM B. KNAPP, of Elizabeth, in the county of Union and State of New Jersey, have invented an Improvement in Umbrella-Runners, of which the following is a specification:

Umbrella-runners are usually made with a slot in the tube of the runner, into which the latch springs when closed, and in some instances the latches on the stick spring into this slot or opening, when the umbrella is either opened or closed. In these instances the thin sheet metal of the cylinder is liable to be bent by pressure against the latch, and the runner often catches upon the stick and scratches the same.

I remedy this evil by surrrounding the tube or cylinder of the runner with metal rings, both at the top and bottom ends of the slot, which rings are sufficiently strong to withstand the pressure of the latch without bending.

The spring-latches of the stick are usually depressed by the thumb, and in so doing the flesh is often pinched.

A cone has been employed to depress the spring; but by pulling upon that cone the umbrella is closed so suddenly, when the latch yields, that the umbrella is often injured.

Umbrella-runners have also had a vibrating leaf or shield covering the longitudinal slot, and against which the thumb acted in operating the locking-spring. This shield has been attached at one end in some instances and at both ends in other instances. I do not claim this feature.

I make use of an umbrella-runner having a mortise for the spring-latch of the stick, and rings at the ends of the mortise to strengthen the same, and a spring thumb-shield over said mortise, secured at both ends of the runner, but free to move at one end, so as to yield to the pressure in operating the locking-spring.

In the drawing, Figure 1 is a section of the runner with the stretchers in the position they assume when the umbrella is spread. Fig. 2 is a similar view when the umbrella is closed. Fig. 3 is an elevation of the runner, and Fig. 4 is a section of the runner with the thumb-shield and spring pressed back ready for the runner to be moved.

The tube or cylinder *a* of the runner has the ordinary notch-ring *b* at one end for the stretchers *c*, as usual.

The slot or mortise *b'* in the tube *a* is adapted to receive the stick-spring *d* when the umbrella is spread, or the spring *e*. When the umbrella is closed, and the metal at top and bottom ends of this slot is strengthened by the rings *i i*, that are soldered on, and support the sheet metal under the pressure against the spring *d* or *e*.

The spring thumb-shield *l* is attached at its ends to the tube *a*, and it is contiguous to the slot.

I prefer that the end 2 be turned behind the metal of the cylinder and soldered, and that the end 3 slide freely through a mortise adjacent to the end band or flange 4 of the cylinder *a*, so that the shield will yield freely to pressure by the thumb, and press the spring *d* or *e* back in unlatching the runner.

I claim as my invention—

The umbrella-runner having the tube *a*, mortise *b'*, and rings *i i* at the ends of the mortise, and the thumb-shield *l* contiguous to said slot, with both ends connected to the tube *a*, as set forth.

Signed by me this 22d day of November, 1875.

ABRAM B. KNAPP.

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