

O. M. SMITH.
Umbrella-Runner.

No. 210,813.

Patented Dec. 10, 1878.

Fig. 1.



Fig. 2. a a



Fig. 3. a a

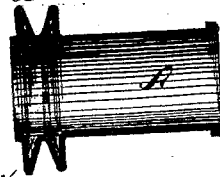


Fig. 4.

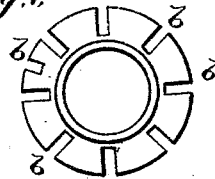


Fig. 5. a a



Witnesses:

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per:
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UNITED STATES PATENT OFFICE.

ORREN M. SMITH, OF FRANKFORD, PENNSYLVANIA, ASSIGNOR TO
S. W. EVANS & SON, OF SAME PLACE.

IMPROVEMENT IN UMBRELLA-RUNNERS.

Specification forming part of Letters Patent No. **210,813**, dated December 10, 1878; application filed
January 12, 1878.

To all whom it may concern:

Be it known that I, ORREN M. SMITH, of Frankford, in the State of Pennsylvania, have invented certain new and useful Improvements in Umbrella Runners and Notches; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to umbrella runners and notches; and it consists in the particular construction of the same, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a plain tube. Fig. 2 shows the first stage of manufacture. Fig. 3 shows the runner and notch complete, in section. Fig. 4 is a face view of the notch, and Fig. 5 shows the notch formed separate and put on the runner.

A represents a tube of proper length, which, by means of rollers, is made to assume the shape shown in Fig. 2—that is to say, having two convex beads, *a a*, close together around its circumference. These beads are, of course, on the inside in the form of grooves. The metal in the beads *a a* is then, by means of suitable punches, pressed together, and assumes the form shown in Fig. 3, thereby forming a

grooved tube the proper shape for a runner ring or notch, after which the nicks *b b* are cut in the desired numbers.

This runner or notch may be made of a flat piece of metal, and then bent into a round tube and formed by rollers and punches in the same manner.

These rings or notches can be made separate, and then soldered onto a barrel or tube to form a runner or notch; or by taking a tube of the proper length they can be made all in one piece.

A solid metal ring may be put on the tube before forming the notch, thereby making it stronger.

I am aware of English Patent No. 3,220 of 1864, and do not claim any of the features therein contained.

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

A notch-ring for umbrellas or parasols made of one piece of sheet-metal tubing, having two annular flanges adjacent to each other, and each flange made of a double thickness of the sheet metal of the tube, spread outwardly and folded double, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ORREN M. SMITH.

Witnesses:

WM. B. HILT,
C. J. SAUBET.