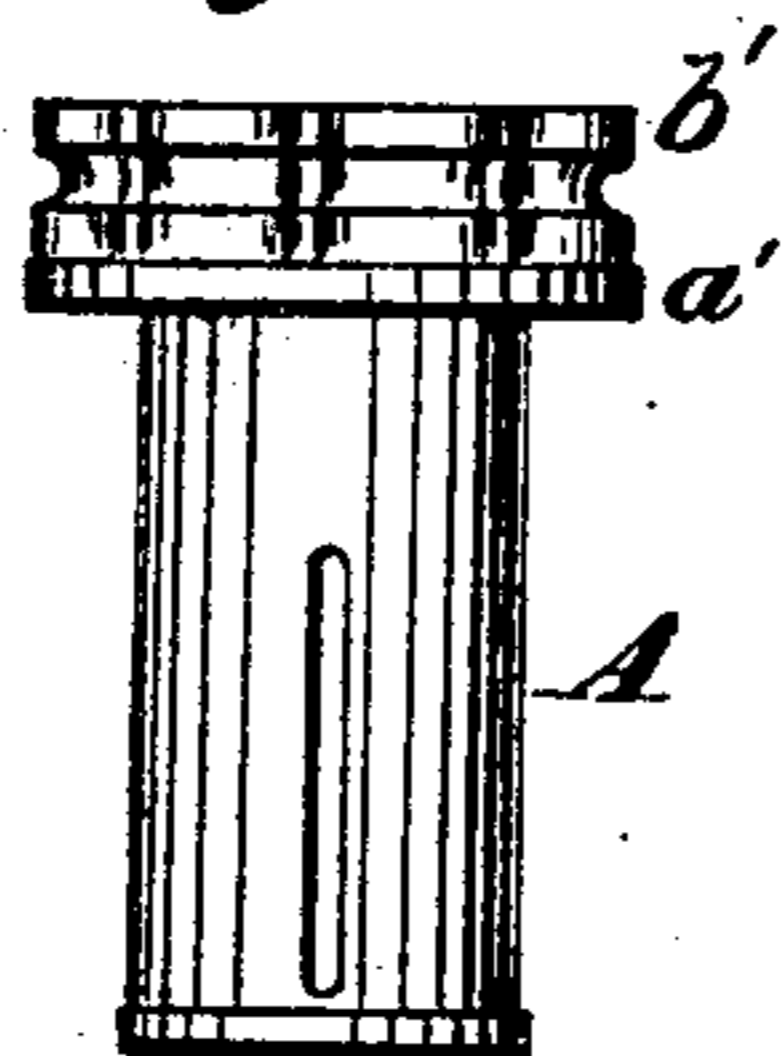


A. G. DAVIS.  
UMBRELLA RUNNER.

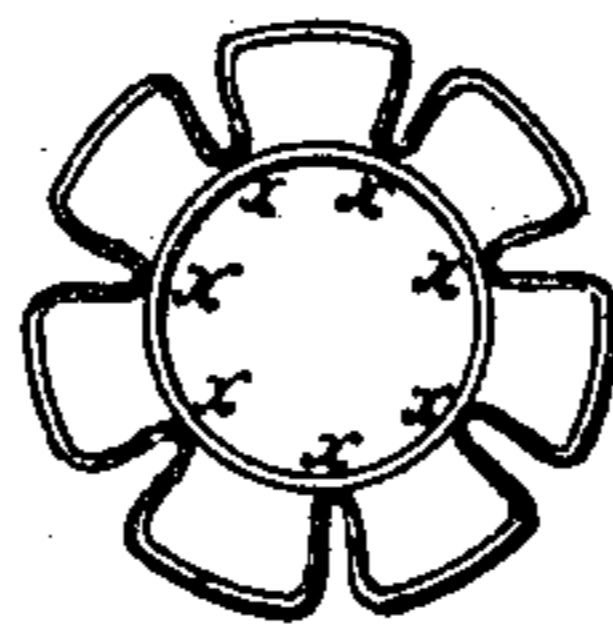
No. 75,381.

Patented Mar. 10, 1868.

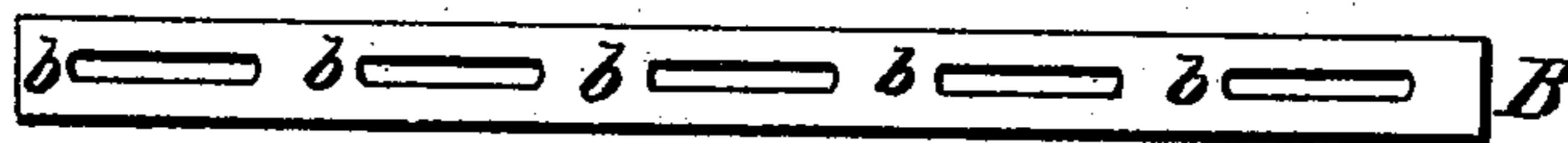
*Fig. 1.*



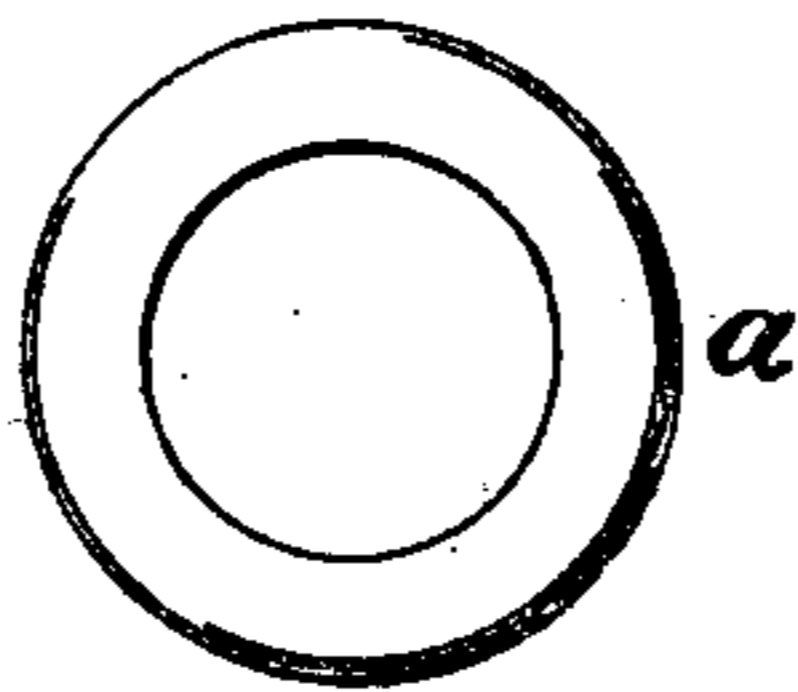
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



*Witnesses:*

*Frederic Thomas.*  
*W. E. Stumph.*

*Inventor:*

*Anthony G. Davis*

# United States Patent Office.

ANTHONY G. DAVIS, OF WATERTOWN, CONNECTICUT.

*Letters Patent No. 75,381, dated March 10, 1868.*

## IMPROVEMENT IN UMBRELLA-RUNNERS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, ANTHONY G. DAVIS, of Watertown, in the county of Litchfield, and State of Connecticut, have invented a new and improved Umbrella-Runner; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention consists in an improved construction of runners for umbrellas, parasols, &c., as will be fully described.

In the drawings, A represents a cylinder, constructed in the ordinary manner, provided near its upper end with the cap *a*, which is made, in this case, a little larger in its circumference than the largest circle of the runner-head. B represents a flat strip of metal, in which are pierced, at regular and suitable intervals, the slots *b*, which strip being subjected to a forming process, (by which means it is forced into suitable shape, that of a corrugated ring, as shown, the ends of which are bent and locked together in any suitable manner,) makes the head *b'*. This head *b'* is soldered to the cylinder at the points *x*, and it can be also fastened to the cap, if desired.

It will be observed that the cap *a* is turned up over the lower part of the ring, by which means additional support and strength are given to the head, the excess in its circumference being intended for this purpose.

I am aware that there is a runner in use somewhat similar in general appearance to mine, that is, where a cylinder, cap, and piece of peculiarly-shaped metal are used in combination with each other. The difference between this runner and mine, however, will be apparent upon a slight examination. In the former the head is formed from a solid ring of metal, suitably cut and crimped, which is attached to the cylinder by its edges. My head, on the contrary, is not made from a ring of metal, but from a flat strip, in which slots are cut, and instead of being attached to the cylinder by its edges, it is fastened by means of the projections upon its inner side, which are much more easily soldered because of their greater width, and its edges rest upon the cap. Furthermore, mine is strengthened by the lapping of the cap—a feature not shown in the other.

There are many advantages connected with this manner of construction. The head or ring *b'* is cut from a strip of metal without waste, and as the bends are made in parallel lines, the metal is not subject to the same amount of strain as when formed in rings. The metal can also be worked with the grain, which is otherwise impossible, and the liability to fracture thus made much less.

The form of mine, when complete, is much superior to anything in use. It will be observed that when in place the slots lie contiguous to each other, and are in position to receive the wire for holding the stretchers. It will also be observed that the bends between the slots are solid metal, this construction giving great strength and solidity to the head, and effectually preventing fracture by any lateral pressure, as is frequently the case.

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

The cylinder A and flanged cap *a*, in combination with the head *b'*, the latter being constructed of the slotted strip B, shaped as described, and arranged in such manner that the slots lie contiguous to each other, the bends between being solid metal, substantially as and for the purpose set forth.

This specification signed and witnessed, this thirty-first day of December, 1867.

ANTHONY G. DAVIS.

Witnesses:

H. W. BEADLE,  
FREDERIC THOMAS,