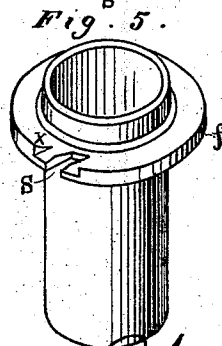
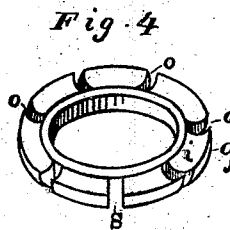
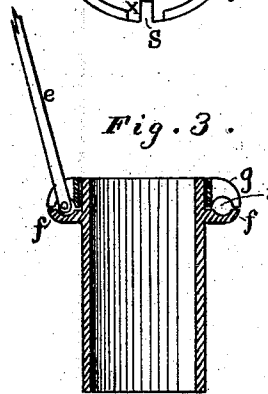
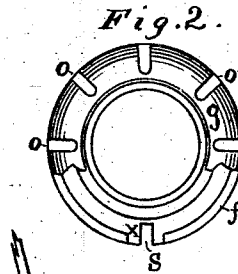
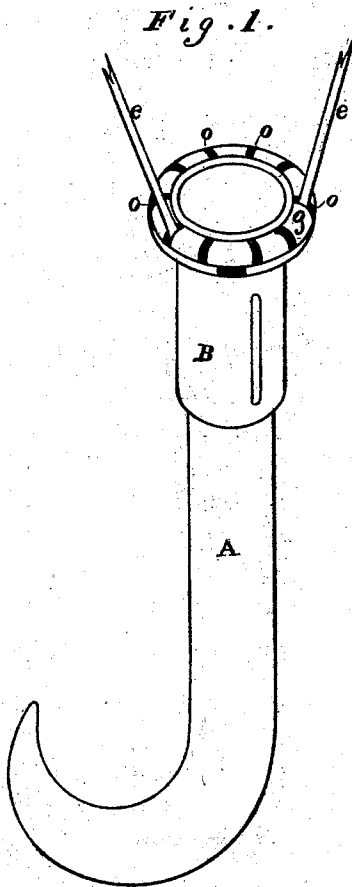


A. GOOD.
 UMBRELLA RUNNER.

No. 187,615.

Patented Feb. 20, 1877.



Witnesses
Geo. H. Strong
Oswyn J. Stacy



Inventor
Adam Good
By his Attys
Dewey & Co.

UNITED STATES PATENT OFFICE.

ADAM GOOD, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-HALF
HIS RIGHT TO JOHN J. SMITH.

IMPROVEMENT IN UMBRELLA-RUNNERS.

Specification forming part of Letters Patent No. 187,615, dated February 20, 1877; application filed
December 11, 1876

To all whom it may concern:

Be it known that I, ADAM GOOD, of the city and county of San Francisco and State of California, have invented an Improved Umbrella Runner; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing.

My invention relates to an improved runner for umbrella-handles; and it consists of a novel arrangement for connecting the ends of the wire braces, which spread and strain the ribs of the umbrella, when the umbrella is open, with the upper end of the runner, so that they can be easily attached to or detached from it when desired.

Referring to the accompanying drawing, let A represent an umbrella-handle, and B the runner or tube, to the upper end of which the brace or straining wires *e e* are attached.

To make this runner I take a tube of the desired length and diameter, and secure a flange, *f*, around it at a short distance from its upper end. I then construct a ring, *g*, with a groove, *i*, on its under side, and as many notches or slots, O, as there are bracing-wires to be attached to the runner.

The ring *g* is made of the proper size to fit over the upper end of the tube B, and rest upon the flange *f*. I then upset or turn the upper edge of the tube outward, so as to confine the ring in place, but allow it to rotate, when moved by hand. The slots or notches O extend only partially across the ring, but sufficiently far to pass across the groove *i* on its under side.

At a single point in the circumference of the flange *f* I make a notch or slot, S, for the purpose hereinafter described.

The lower end of each wire-brace *e* I flatten, and through this flattened portion I place a short piece of wire, *t*, which will extend out on each side to serve as trunnions for the end of the wire to move upon.

On each side of the notch S in the flange *f*, and in the upper edge of the flange, I make a depression, X, which will, when the ring *g* is in place, form a T-shaped passage directly from the outside of the ring-groove *i*, between the ring and flange. This depression or hori-

zontal slot is just large enough to permit the trunnions or pins *t* to pass through it into the grooves *i*, and when one of the notches O in the ring is brought directly above and in line with the notch or slot S in the flange, the flattened portion of the wire-brace will be received in the notch in the ring. After this, by turning the ring *g*, the end of the wire will be carried away from the notch in the flange, and thus confined in its position.

By turning the ring *g* so as to bring each of the notches in the rim over the T-shaped notch in the flange, all of the brace-wires can be thus attached to the runner, and by setting the ring so that the notches in the flange will be between two of the notches in the ring, the wires will be locked in place. By the same operation reversed, the wires may be removed when desired.

Instead of making the ring movable and the flange stationary, I can make the ring stationary and the flange movable, and this I shall generally do, because it would be a cheaper and more convenient plan. Both devices, however, accomplish the same purpose, and operate on the same principle.

This runner will be both convenient and ornamental, and by its use the owner of an umbrella can easily relax the parts by releasing the brace-wires, so that any part of the umbrella can be readily repaired.

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

The tube or runner B, provided with the stationary flange *f*, with its T-shaped notch S, and having the rotating ring *g*, provided with a groove, *i*, on its under side, and as many notches O in its rim as there are wires to be attached, in combination with the brace-wires *e*, having the ends flattened, and provided with pins *t*, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand and seal.

ADAM GOOD. [L. S.]

Witnesses:

FRANK A. BROOKS,
WALTER C. BEATTIE.