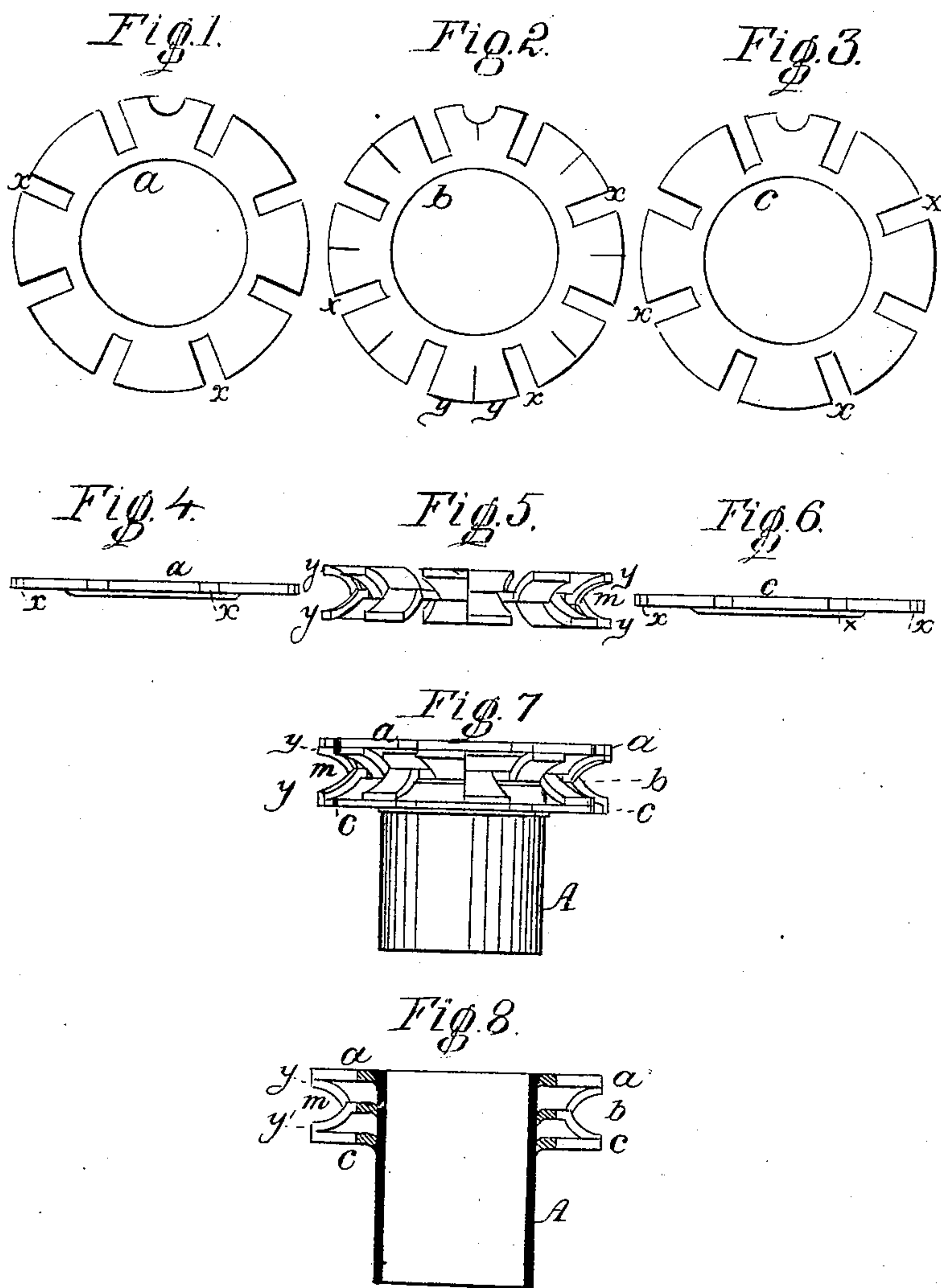


O. M. Smith.
Umbrella Runner.

No 90,883.

Patented June 1, 1869.



WITNESSES { *Wm. A. Steel.*
John Parker

O. M. Smith
By Wm. A. Steel
J. H. Howard

United States Patent Office.

ORREN M. SMITH, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 90,883, dated June 1, 1869.

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, ORREN M. SMITH, of Philadelphia, Pennsylvania, have invented an Improvement in Notches and Runners for Umbrellas; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of a ready, efficient, and economical mode, fully described hereafter, of making the grooved and slotted flanges of notches and runners for umbrellas.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figures 1, 2, and 3, are plan views of the three annular plates, which together form a part of my improved notch or runner, for umbrellas and parasols;

Figure 4, an edge view of fig. 1;

Figure 5, an edge view of fig. 2;

Figure 6, an edge view of fig. 3;

Figure 7, an exterior view of the complete notch; and

Figure 8, a sectional view of the same.

All the figures are drawn to an enlarged scale.

A is the tube of the notch, and to this tube are soldered the three metal rings *a*, *b*, and *c*.

Each of these rings has as many slots, *x*, as there are ribs in the umbrella, and in the ring *b*, fig. 2. Each piece of metal between the slots is split, so as to form two lips, *y* and *y'*, one being bent upward and the other downward, throughout the series.

A ring, with a groove, *m*, on its edge, is thus formed, the lips *y* and *y'* constituting the edges of the grooves, or, as they may be termed, flanges, discontinued at intervals.

The rings are then fitted to the tube A, first the ring *b*, between the rings *a* and *c*, care being taken to so adjust them that the slots *x* of the whole of the rings coincide with each other. The notch is now complete, there being in it the desired number of slots for receiving the pierced ends of the ribs, and a groove, *m*, for receiving the wire which passes through the holes in the ribs.

The runner, which is arranged to slide on the stick of the umbrella, may be made in a precisely similar manner, excepting that the tube A has to be considerably longer than that of the notch.

It has been the practice to make the grooved and slotted flanges of umbrella-notches out of solid rings of brass, soldered to the tubes, a plan demanding tedious manipulation.

In carrying out my invention, the rings *a*, *b*, and *c*, are quickly stamped out of the tinned plates, the lips of the middle ring being as rapidly bent to the desired shape. While a grooved and slotted flange equal to those formerly made of solid metal is thus produced, there is a saving in the cost of material, time, and labor.

I claim as my invention, and desire to secure by Letters Patent—

An umbrella-notch, or runner, in which the grooved or slotted flange is made of three sheet-metal rings, formed and adapted to each other, substantially as and for the purpose herein set forth.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

ORREN M. SMITH.

Witnesses:

JOHN WHITE.

HARRY SMITH.