

Orren M. Smith,
Improved Umbrella Runner or Notch.

116767

PATENTED JUL 4 1871

Fig. 1.

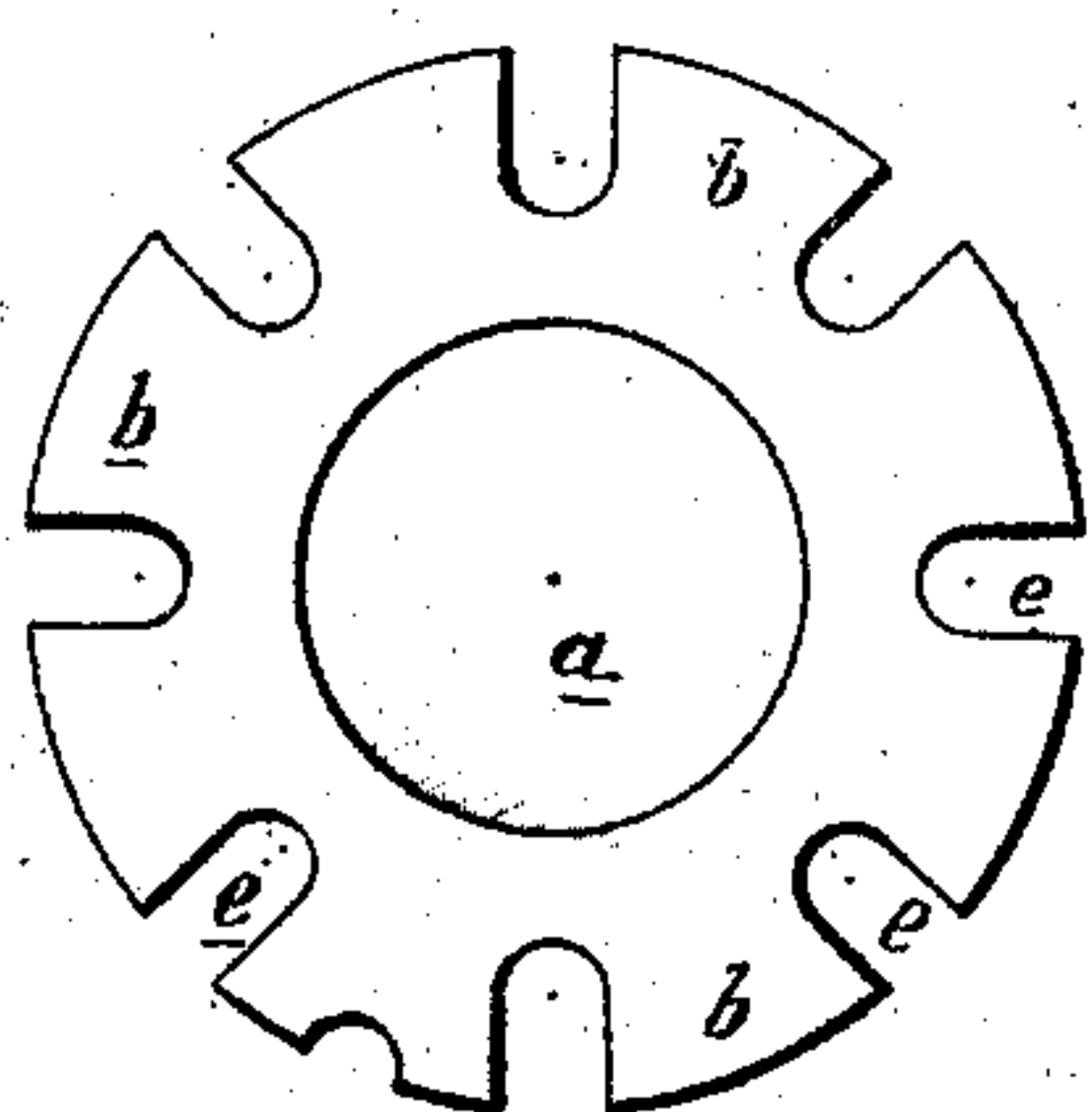


Fig. 2.

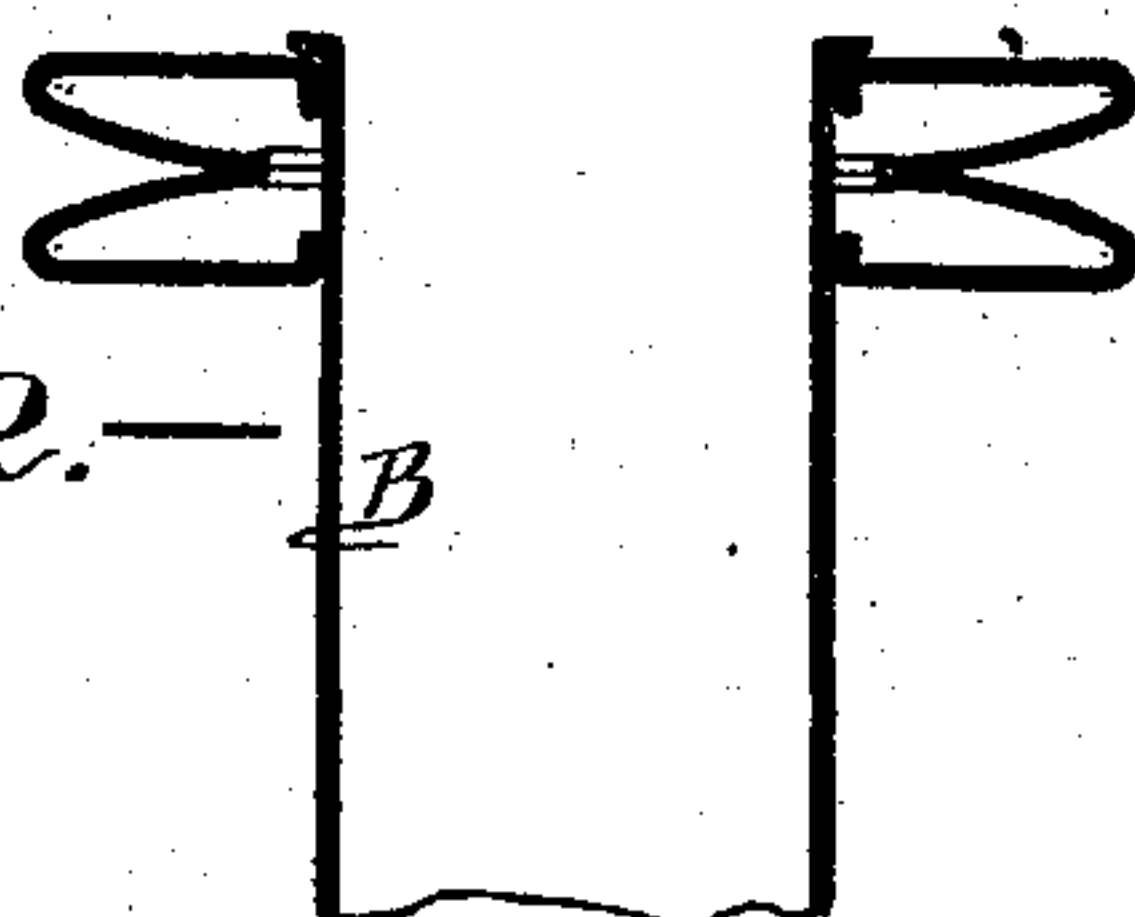


Fig. 3.

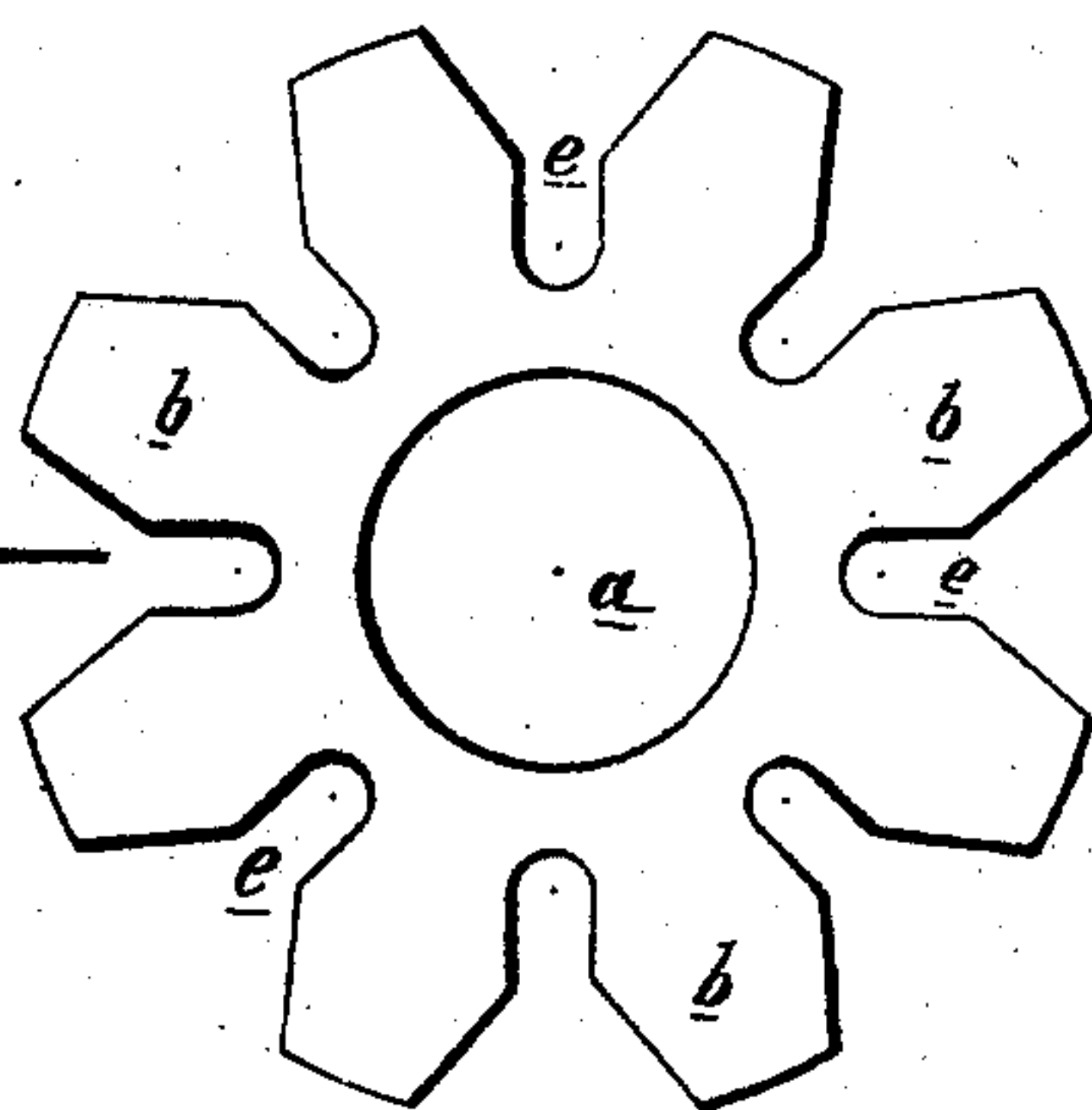
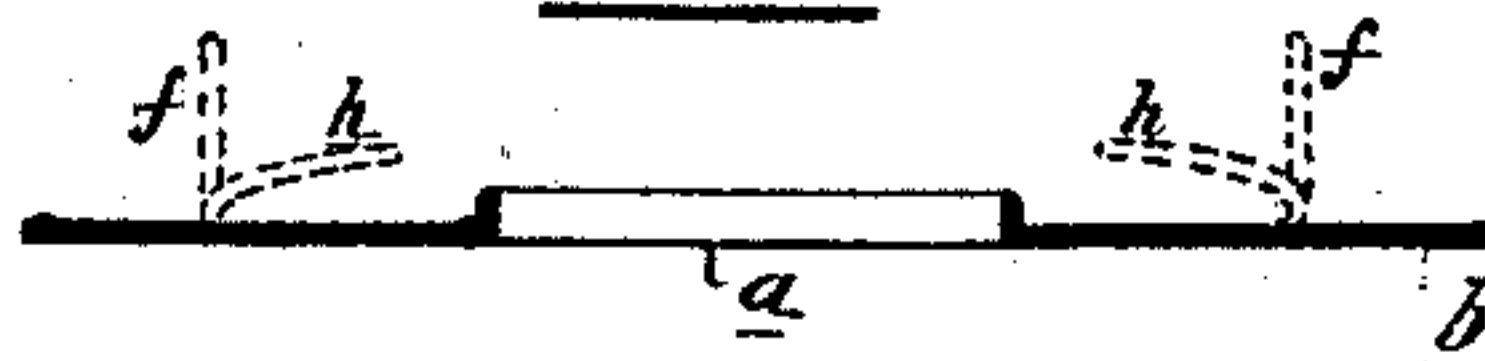


Fig. 4.



Witnesses

Wm. A. Steel
John Parker

Orren M. Smith.
by his atty
Howson and Son

UNITED STATES PATENT OFFICE.

ORREN MARK SMITH, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN UMBRELLA-RUNNERS OR NOTCHES.

Specification forming part of Letters Patent No. 116,767, dated July 4, 1871.

To all whom it may concern:

Be it known that I, ORREN MARK SMITH, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented an Improved Umbrella-Runner or Notch, of which the following is a specification:

My invention consists of the head of an umbrella-notch or runner, composed of two thin metal disks, cut, bent, and secured to a tube, substantially in the manner described hereafter.

Figure 1 is a plan view of my improved runner or notch for umbrellas; Fig. 2, a vertical section of the same; Fig. 3, a plan of the plate of thin metal from which part of the runner or notch is formed; and Fig. 4, a vertical section of the said plate.

In constructing my improved runner or notch I first prepare two disks of thin metal, (tinned plate, for instance,) of the form shown in Fig. 3—that is, with a central hole, *a*, and an appropriate number of arms, *b*, with intervening slots, *c*. These disks may be cut from a plate by suitable punches and dies to the desired shape at one operation. Each disk is then subjected to the action of the dies, by which all the arms are bent at right angles, as shown by the dotted lines *f*, Fig. 4; and these arms are further bent and de-

pressed so as to assume the inclined position shown by the dotted lines *h*, Fig. 4. The two disks thus prepared are then placed with their bent arms together, as shown in Fig. 2, soldered to each other and to a short tube, *B*, so as to form the grooved and slotted head of a runner or notch.

The perforated ends of the umbrella or parasol-ribs are introduced, one into each of the slots *e*, between the bent arms, and a wire is passed through the holes of the ribs and coiled in the groove between the two disks as usual, thereby jointing the ribs to the runner or notch.

The slotted and grooved heads of runners and notches may be constructed in the above-described manner both rapidly and economically.

I claim—

The head of an umbrella-runner or notch, composed of two metal disks, cut, bent, and secured to a tube, substantially in the manner described.

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

Witnesses: ORREN M. SMITH.

WM. A. STEEL,

FRANK. B. RICHARDS.