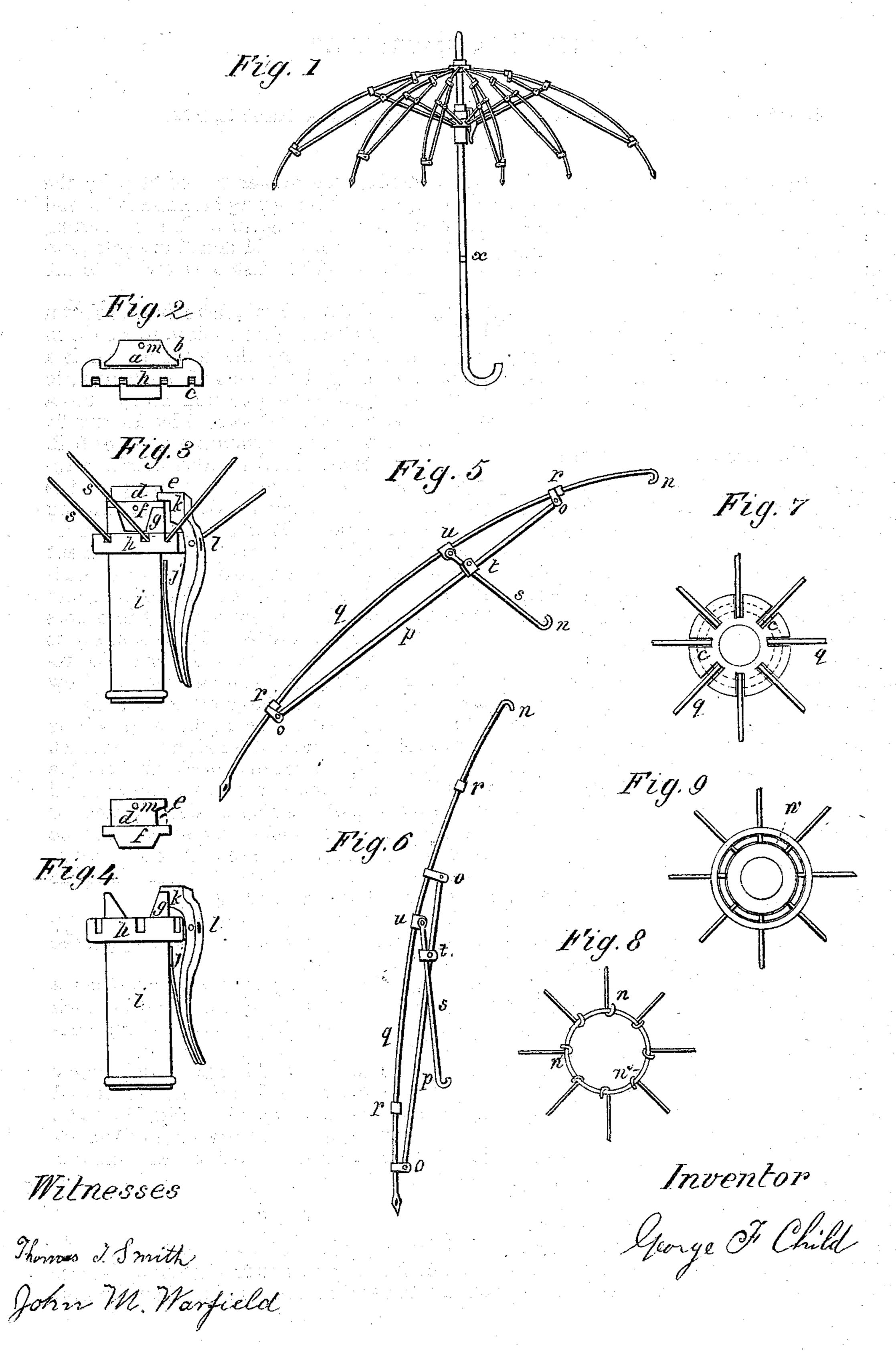
GEORGE F. CHILD.

Improvement in Umbrellas.

No. 124,935.

Patented March 26, 1872.



UNITED STATES PATENT OFFICE.

GEORGE F. CHILD, OF COLUMBUS, OHIO.

IMPROVEMENT IN UMBRELLAS.

Specification forming part of Letters Patent No. 124,935, dated March 26, 1872.

SPECIFICATION.

I, GEORGE F. CHILD, of Columbus, in the county of Franklin and State of Ohio, have invented certain Improvements in Umbrellas and Sun-Shades, of which the following is a specification:

Nature and Objects of the Invention.

First, is to insure durability; and, second, to prevent the wind turning the umbrella. Third, to allow the umbrella to be taken apart in sections.

Description of the Accompanying Drawing.

Figure 1, general view of umbrella with the rib-brace and ties attached; Fig. 2, top fastening device, showing an annular slot, in which the ring W is placed, and also a series of slots, in which hooks N work when upon ring W; Fig. 3, lower fastening device and the catch and stop as fastened when the umbrella is extended, showing the brace hooked onto the lower ring; Fig. 4, stop, lower fastening, catch, showing the stop and catch arrangement; Fig. 5 shows the hooks, rib, brace, and tie extended; Fig. 6, form of rib, partly closed down, showing the stops and the changed position of the brace and tie; Fig. 7, under side of Fig. 2 or upper side of Fig. 3 or 4; Fig. 8, ring, showing the hooks as attached; Fig. 9, top view of Fig. 2 or under side of Fig. 3.

General Description.

Fig. 1, X is an eye in handle for catch K to

fasten in when closed down.

Fig. 2, A is a sleeve of the upper or rib-fastening device or top notch, and having shoulders for ends of hooks N. B is a slot containing ring W. C is one of a circular series of slots for hooks N to work in when hooked on ring W. This is used to prevent any right or left movement to rib Q.

Figs. 3 and 4, D is a stop fastened to the handle, as shown. E is an eye in D for catch K to fasten in when extended; F, tenon on D fitting into mortise G of slide I; G, mortise in lower fastening to receive tenon F. F and G are used to prevent twisting of the umbrella around the handle. H is constructed the same as the device shown in Fig. 2, only inverted. I is the runner or extended sleeve of A in Fig. 2, supporting the handle. K is a catch or le-

ver, fastening the runner to the stop by the use of eye E. J is a spring fastened to the end of catch K and resting on I. L is a fulcrum, upon which K works. M and M are bolts, rivets, or screws, which fasten D and A to the handle.

Figs. 5 and 6, Q is a rib, fastening, as shown in Fig. 1, by means of its hook n, to ring w in Fig. 2, and supporting the covering. S is a brace, fastening, by means of its hook n, to ring w in Fig. 3 and supporting rib Q. P is a sliding tie, fastened to brace S by fulcrum T, and, when extended, terminates at stops R R. This is used to prevent the umbrella from turning. O and O are eyes or fastenings at the ends of tie P, clasping rib Q, and permitting the sliding action. R and R are stops on rib Q for the termination of the sliding movement of clasps O and O when the umbrella is extended. N and N are hooks upon the end of rib Q and brace S. These hooks pass severally into slots C and fasten upon ring W. These hooks pass over the ring W in Fig. 2 and under the corresponding ring in Fig. 3, and are used to allow the umbrella to be taken apart in sections.

The form given to the hooks is, as will be seen, such that, when desired, any single rib and brace may be readily lifted off from the rings (for repairs or otherwise) without removal or disturbance of the ring or derangement of the other ribs or braces. They may also be as readily put to place again. T is a fulcrum, upon which tie P and brace S work. U is the fastening of brace S to rib Q.

Fig. 7 shows the lower side of Fig. 2 or upper side of Fig. 3 with the hook N clasping the

ring W, seen in slot C.

Fig. 8 shows a ring or a wire cut from a coiled spring and resting in slot B, and on which hook N is fastened. This is used to insure du-

rability.

Fig. 9 is a top view of Fig. 2 or under view of Fig. 3, showing the ring in the slot B and the hooks passing over the ring W. The hooks, it will be seen, are prevented from accidentally getting unhooked by the annular part of the piece h.

Claims.

I claim as my invention—

1. I claim the notch or rib-fastening device, constructed as described, and as shown in Fig. 2, of one piece of metal, and having a ringgroove, and the rib-slots C, for the purposes specified.

2. I also claim the runner or brace-fastening device, constructed with a sleeve, as described and as illustrated in Fig. 4, of one piece of metal, having a ring-groove, and the slots C, for the purposes specified.

3. I also claim the stationary stop D, constructed with a tenon or tenons, F, and eye E,

as and for the purpose described.

4. I also claim, in combination with stop D. having a tenon or tenons, a sliding runner, I, Thomas T. Smith, provided with a mortise or mortises to inter- John M. Warfield.

lock with such tenons, as and for the purpose set forth.

5. I also claim the combination, with stop D, provided with its tenon or tenons, and also with an eye, of a mortised sliding runner carrying a catch-lever, which locks in said eye.

6. I also claim, in combination with a rib having stops or their equivalent thereon, and with a brace or stretcher, the sliding tie P, operating as and for the purpose set forth.

GEORGE F. CHILD.

Witnesses: