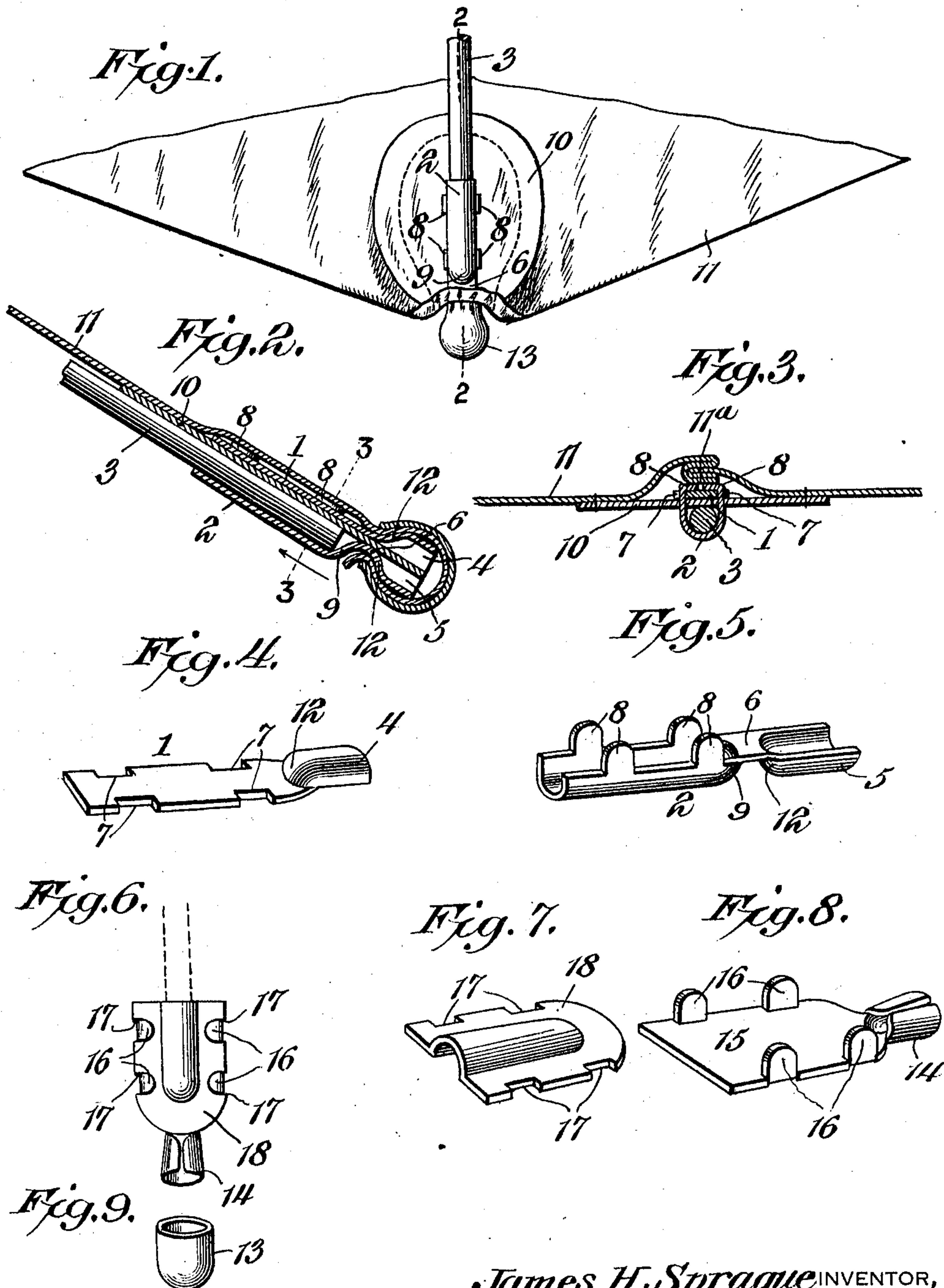


J. H. SPRAGUE.
 UMBRELLA TIP.
 APPLICATION FILED JAN. 9, 1911.

988,904.

Patented Apr. 4, 1911.



WITNESSES

Howard D. Orr.
 J. H. Riley

James H. Sprague, INVENTOR,

BY

E. G. Siggers

ATTORNEY

UNITED STATES PATENT OFFICE.

JAMES H. SPRAGUE, OF NORWALK, OHIO.

UMBRELLA-TIP.

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Specification of Letters Patent.

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To all whom it may concern.

Be it known that I, JAMES H. SPRAGUE, a citizen of the United States, residing at Norwalk, in the county of Huron and State of Ohio, have invented a new and useful Umbrella-Tip, of which the following is a specification.

The invention relates to improvements in umbrella tips.

10 The object of the present invention is to improve the construction of the means employed for securing the cover of an umbrella to the ribs thereof, more especially the device shown and described in Patent No. 728,035, 15 granted to me May 12, 1903, and to provide simple, inexpensive and efficient means, capable of holding the outer edges of the sections of the cover at the seam thereof and of preventing the edges of the cover from 20 dropping, and adapted to present a neat, ornamental and attractive appearance.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully 25 described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the 30 scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a plan view of the underside of a portion of an umbrella 35 cover, illustrating the outer portion of one of the ribs and the manner of connecting the same with the cover. Fig. 2 is a longitudinal sectional view on the line 2—2 of Fig. 1. Fig. 3 is a transverse sectional view 40 on the line 3—3 of Fig. 2. Figs. 4 and 5 are detail views of the clamping sections. Fig. 6 is a detail view of the two clamping sections, illustrating another form of the invention. Figs. 7 and 8 are detail perspective 45 views of the clamping sections, shown in Fig. 6. Fig. 9 is a detail view of the hollow ball-shaped tip, showing the same before it is crimped on the tubular extension.

Like numerals of reference designate corresponding parts in all the figures of the 50 drawing.

In the embodiment of the invention illustrated in Figs. 1 to 5 inclusive, 1 and 2 designate sections of a socket or seat, which is 55 adapted to receive the outer end of a rib 3. The section 1 consists of a flat plate or body,

provided at its outer end with a semi-tubular extension 4, and the other section 2 consists of a semi-tubular body, forming an open sided groove and provided at its outer 60 end with a semi-tubular extension 5, connected with the semi-tubular body 2 by an integral portion 6 of metal of which the section 2 is constructed. The sections 1 and 2 are preferably formed of sheet metal, but 65 they may be constructed of any other suitable material. The section 1 is provided at opposite sides with marginal recesses or notches 7 for the reception of tongues 8, which are bent against the outer face of the 70 section 1, as clearly illustrated in Fig. 3 of the drawings, whereby the two sections are secured together and form a rib receiving socket or seat. The rib receiving socket or seat is open at one end, and the inner end of 75 the semi-tubular section is shaped to form an end wall 9, which closes the outer end of the rib receiving seat or socket. The flat section 1 is located at the inner face of the patch, and is interposed between the same 80 and the cover 11.

The marginal notches 7 are rectangular and form end walls, which prevent longitudinal movement of the sections on each other. The tongues 8 or lugs, which engage 85 the notches, also pierce a reinforcing patch 10, constructed of the same material as the canopy or cover 11 of the umbrella, and interposed between the sections and forming attaching means for securing the rib receiving socket or seat to the cover of the umbrella. The reinforcing patch is applied to 90 the underside of the cover at the radial seams 11^a, connecting the sections or portions of the cover, as clearly illustrated in Fig. 1 of the drawing. The semi-tubular extensions 4 and 5 fit together and form an outer tubular extension, which, in the form 95 illustrated in Figs. 1 to 4 inclusive, is tapered at the inner end at 12 to enable a hollow cap 13 to be crimped into positive engagement with it. The patch is arranged 100 on the underside of the cover with the outer end of the tubular extension spaced from the marginal edge of the same and the outer edge of the cover is creased and folded over 105 and around the tubular extension, and the cap is then fitted over the folded portion of the cover and the tubular extension and is crimped thereon. This secures the outer portion of the cover around the tubular extension 110 and keeps the said outer portion from

dropping and avoids hemming the same. Also the hollow cap forms a ball-shaped tip, which not only makes a neat finish, but provides an ornamental and attractive tip.

5 In the form of the invention illustrated in Figs. 6 to 8 inclusive, a tubular extension 14 is formed integral with the flat section 15, and the latter is provided with
10 tongues or lugs 16, which engage recesses or notches 17 of the other section 18 of the rib receiving seat or socket. The tubular extension 14, which is adapted to receive the marginal edge portion of the cover of the umbrella in the same manner as the tubular
15 extension heretofore described, is tapered from its outer to its inner end, and it is formed by bending or rolling the metal transversely, as clearly shown in Figs. 6 to 8. The cap 13 is adapted to be crimped over the extension 14 and over the folded or creased portion of the cover of the umbrella, and the
20 long taper of the extension 14 will operate in the same manner as the short taper 12 and enable the cap to positively engage it. The section 18 is provided at an intermediate point between its side edges with an open
25 sided groove, and it coöperates with the flat section to form a socket or seat for the outer end of the rib.

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

1. The combination with an umbrella cover, and a reinforcing patch secured to
35 the same, of an umbrella tip including a rib receiving socket or seat, and composed of sections located at the opposite faces of the reinforcing patch and clamping the latter between them, and provided with an extension projecting beyond the patch and receiving and supporting the marginal portion of the umbrella cover, and means for retaining the umbrella cover on the extension.

2. The combination with an umbrella
45 cover, and a reinforcing patch secured to the same, of an umbrella tip including a rib receiving socket or seat, and composed of sections located at the inner and outer faces of the reinforcing patch and clamping the same between them, and provided with a tubular extension receiving and supporting the marginal portion of the cover, and means for retaining the umbrella cover on the tubular extension.

55 3. The combination with an umbrella cover, and a reinforcing patch secured to the same, of an umbrella tip including a rib receiving socket or seat, and composed of sections located at the inner and outer
60 faces of the reinforcing patch and clamping the same between them, and provided with a tubular extension receiving and supporting the marginal portion of the cover, and a cap secured on the tubular extension and retaining the cover thereon.

4. The combination with an umbrella cover, and a reinforcing patch secured to the same, of an umbrella tip including a rib receiving socket or seat, and composed of sections located at the inner and outer faces of
70 the reinforcing patch and clamping the same between them, and provided with a tubular extension projecting beyond the patch and receiving the outer marginal portion of the umbrella cover, and a cap crimped on the
75 tubular extension and retaining the cover thereon.

5. The combination with an umbrella cover, and a reinforcing patch secured to the same, of an umbrella tip including a rib receiving socket or seat, and composed of sections located at the inner and outer faces of the reinforcing patch and clamping the same between them, and provided with a tapered tubular extension projecting beyond the patch and receiving the outer marginal portion of the umbrella cover, which is folded over and around the said extension, and a cap crimped on the tubular extension and retaining the cover thereon.

6. The combination with an umbrella cover, and a reinforcing patch secured to the same, of an umbrella tip including a rib receiving socket or seat, and composed of sections arranged at the inner and outer faces
95 of the reinforcing patch and clamping the same between them, and provided at the outer ends with a tubular extension, the latter being composed of sections formed integral with the sections of the rib receiving socket or seat, and means for retaining the marginal portion of the umbrella cover on the said extension.

7. The combination with an umbrella cover, and a reinforcing patch secured to
105 the same, of an umbrella cover including a rib receiving socket or seat, and composed of sections arranged at the inner and outer faces of the reinforcing patch and clamping the latter between them, and provided at the outer end with a tubular extension, the latter being tapered at the inner end and consisting of sections formed integral with the said sections and receiving the marginal portion of the cover, which is folded
115 over and around the said extension, and a cap crimped into engagement with the tapered portion of the tubular extension for retaining the marginal portion of the cover thereon.

8. The combination with an umbrella cover, and a reinforcing patch secured to the same, of an umbrella tip including a rib receiving socket or seat, and composed of sections arranged at the inner and outer faces
125 of the reinforcing patch and clamping the latter between them, one of the sections consisting of a flat plate and the other section having an open sided groove fitted against said plate, said socket or seat being also pro- 130

vided beyond the groove with a supporting
portion arranged to receive the marginal
portion of the cover, which is folded over
and around the supporting portion, and
5 means for retaining the folded marginal por-
tion of the cover on such supporting portion.

In testimony, that I claim the foregoing

as my own, I have hereto affixed my signa-
ture in the presence of two witnesses.

JAMES H. SPRAGUE.

Witnesses:

GEO. F. STOLL,

HENRY S. MITCHELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
