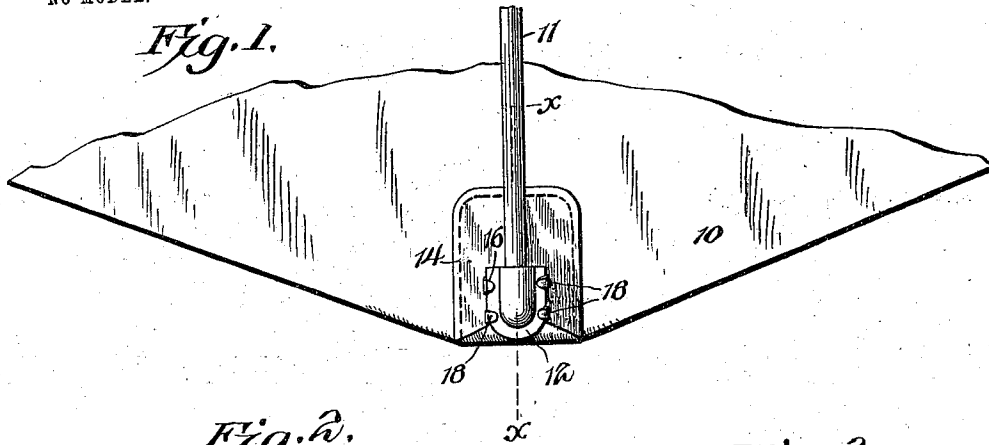
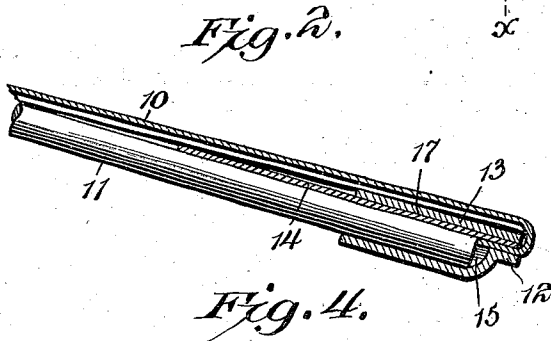
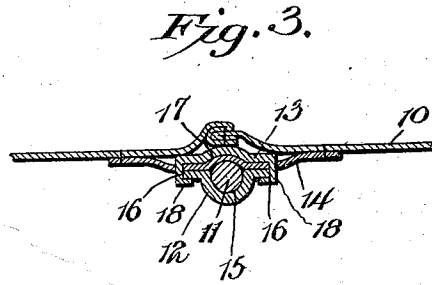
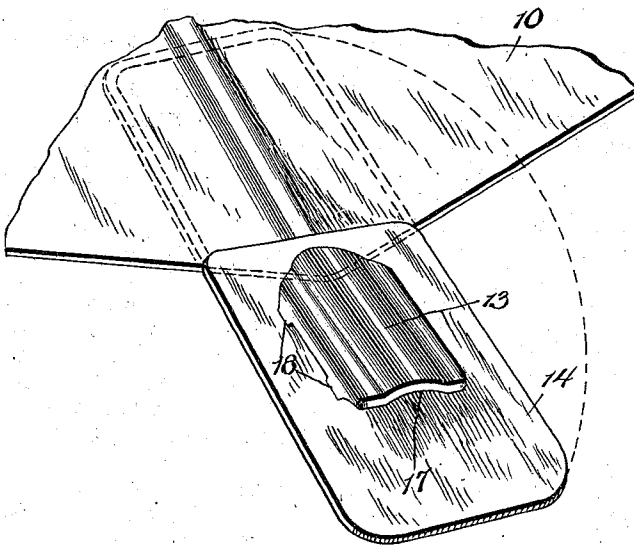
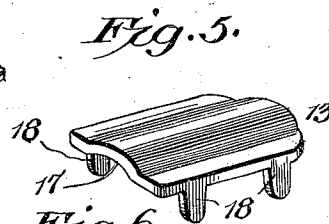
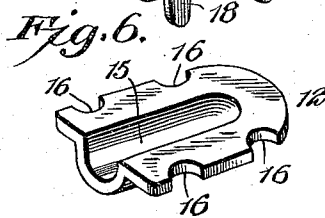


No. 728,035.

PATENTED MAY 12, 1903.

J. H. SPRAGUE.
UMBRELLA.
APPLICATION FILED AUG. 2, 1902

NO MODEL.



James H. Sprague, Inventor,

By

E. G. Sigsbee

Attorney

Witnesses
Howard D. Orr.
B. H. Foster

UNITED STATES PATENT OFFICE.

JAMES H. SPRAGUE, OF NORWALK, OHIO.

UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 728,035, dated May 12, 1903.

Application filed August 2, 1902. Serial No. 118,181. (No model.)

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, of which the following is a specification.

This invention relates to umbrellas, and more particularly to the means for securing the ribs to the cover.

In umbrellas and especially those of larger sizes considerable difficulty has been experienced in fastening the outer ends of the ribs to the covers. Metallic tips have been employed, which are attached in various ways directly to the covers; but these devices often tear out, and thereby injure the fabric.

One of the features of the present invention resides in the construction of the tip, which is made up of sections adapted to be clamped upon fabric in such a manner that there is little liability of its tearing the same.

Another feature relates to the means for fastening the tip to a cover, said means reinforcing the cover, and thus strengthening the same. As a result the danger of tearing is reduced to a minimum and an efficient well-secured tip is provided.

The preferred embodiment of the invention is fully illustrated in the accompanying drawings and is described in the following specification, though it will be apparent upon an inspection of the claims that the structure herein shown and described is open to various changes and modifications.

In the drawings, Figure 1 is a plan view of the under side of a portion of the umbrella-cover, showing a part of one rib and the manner of connecting it to the cover. Fig. 2 is a longitudinal sectional view of the same on an enlarged scale and taken on the line $x x$ of Fig. 1. Fig. 3 is a cross-sectional view. Fig. 4 is a perspective view with the elements partially disassociated to more clearly illustrate the manner of securing them together. Figs. 5 and 6 are perspective views of the tip-sections.

Similar reference-numerals indicate corresponding parts in all the figures of the drawings.

In the embodiment illustrated the cover is

designated by 10 and the rib by 11. These may be of any desired material well-known to the art. The means for fastening the rib to the cover is in the form of a tip comprising clamping-sections 12 and 13 and a reinforcing-patch 14.

The section 12 of the tip consists of a body having a longitudinal open-sided groove 15, that extends from one end and terminates short of the other, this groove being preferably formed by upsetting the body, as shown in Fig. 6. The side edges of the section are provided on opposite sides of the groove 15 with notches 16. The other section 13 is arranged to fit over the section 12, and constitutes a cap which covers the open side of the groove 15, thereby forming a socket or seat for the reception of the end of the rib 11. This cap preferably has a slight longitudinal depression 17 in its under face which aligns with the groove 15. Depending spurs 18 are arranged on the opposite side edges of the cap-section, said spurs being adapted to engage in the notches 16 and be bent over the outer face of the section 12, as clearly shown in Figs. 1 and 3. The reinforcing-patch 14 is preferably constructed of duck or some similar fabric that is strong and yet flexible. In associating these several elements the tip-sections are arranged on opposite sides of the patch, the corner of the cover being also placed between the ends of said sections. The spurs 18 are then passed through the patch, engaged in the sockets 16, and bent over, as already described. Thus the tip is securely fastened both to the cover and patch, and as the latter extends between the entire coacting faces of the tip-sections it will be evident that the comparatively great amount of surface clamped thereby will securely hold the tip against tearing out. This holding action is furthered because of the patch being of strong material. When the tip has been thus secured the parts are in the relation shown in Fig. 4. The patch is then turned against the under side of the cover and switched to the same. As a result the strain will be almost entirely on the seam, and what little strain there is otherwise will be distributed through the patch over a comparatively large area of the cover. Thus it

will be apparent that the fastening means as a whole is very strong and the tip will not readily tear from its fastenings. The several elements going to make up the above are extremely simple and easily constructed, so that an umbrella made in accordance with the present invention can be manufactured at comparatively small expense.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. An umbrella-tip comprising socket-clamping sections arranged to engage opposite sides of a piece of fabric, one of said sections having a rib-receiving seat, and means adapted to be passed through the fabric for securing the sections together.

2. An umbrella-tip comprising separate clamping-sections arranged to engage opposite sides of a piece of fabric, one of said sections having a rib-receiving seat, and spurs carried by one section, said spurs being arranged to be passed through the fabric and bent over the other section.

3. An umbrella-tip comprising separate clamping-sections arranged to engage opposite sides of a piece of fabric, one of said sections having a rib-receiving seat, and spurs carried by one section, the other section having sockets, said spurs being arranged to be passed through the fabric, engaged in the sockets of the other section, and bent over said section.

4. A tip for umbrellas, comprising separate coacting clamping-sections, one of which is provided with an open-sided groove constituting a rib-receiving seat, the other section constituting a cap that covers the open side

of the groove, and means for securing the sections together.

5. A tip for umbrellas, comprising separate coacting clamping-sections, one of which is provided with an open-sided groove extending from one end and terminating short of the other end said groove constituting a rib-receiving seat, the other section constituting a cap that covers the open side of the groove, and means for securing the sections together.

6. A tip for umbrellas, comprising separate coacting clamping-sections, one of which is provided with a groove extending from one end and terminating short of the other end forming a rib-receiving seat, said section having sockets located on opposite sides of the groove, the other section constituting a cap that covers the open side of the groove, and spurs carried by the cap-section, said spurs being arranged to engage in the sockets and be bent over the section containing the same.

7. In an umbrella, the combination with a cover, of a tip comprising clamping-sections, a patch secured between the clamping-sections and fastened to the cover, and a rib engaging the tip.

8. In an umbrella, the combination with a tip comprising a pair of clamping-sections, of a cover, a patch secured to the cover, said patch and cover having portions engaged between the sections, and means for securing the sections together.

9. In an umbrella, the combination with a tip comprising a pair of clamping-sections, one of which has a socket, of a cover, a patch secured to the cover, said patch and cover having portions engaged between the sections, spurs carried by one section, said spurs passing through the patch and engaging the other section, and a rib engaging in the socket of said section.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAMES H. SPRAGUE.

Witnesses:

JOHN A. STRUTTON,
F. M. ROTH.