No. 699,424. Patented May 6, 1902.

A. G. STOUDER.

UMBRELLA COVER FASTENING.

(Application filed Jan. 6, 1902.)

(No Model.)

Fig 1

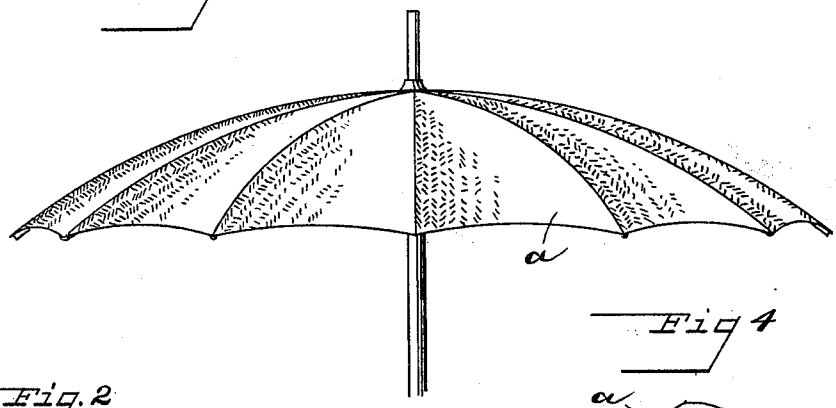


Fig 4

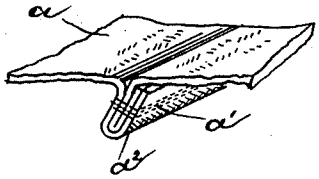


Fig. 2

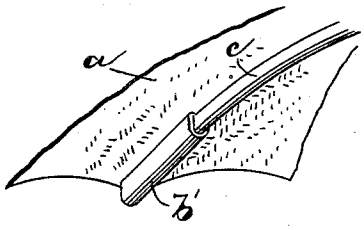


Fig. 3.

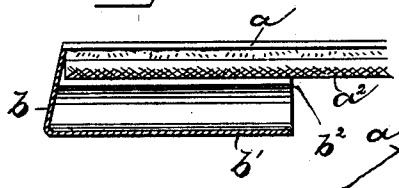


Fig. 5

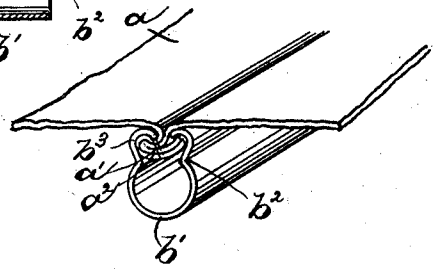


Fig. 6.

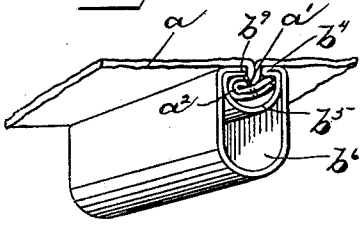
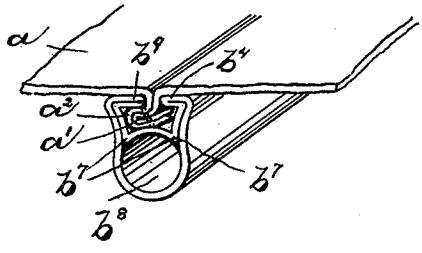


Fig. 7.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

AUGUSTUS G. STOUDER, OF TROY, OHIO, ASSIGNOR TO THE TROY CARRIAGE SUN SHADE COMPANY, OF TROY, OHIO, A CORPORATION OF OHIO.

UMBRELLA-COVER FASTENING.

SPECIFICATION forming part of Letters Patent No. 699,424, dated May 6, 1902.

Application filed January 6, 1902. Serial No. 88,564. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS G. STOUDER, a citizen of the United States, residing at Troy, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Fastening Devices for Umbrella-Covers, of which the following is a specification.

My invention relates to umbrellas, and more especially to a device for fastening the cover to the outer ends of its supporting-ribs.

The object of my invention is to provide a labor-saving, convenient, and substantial means of attaching the cover to the outer ends of the ribs without sewing or puncturing the material and without forming any plate or shield lying on any portion of the outer surface of the cover, the device being secured to the welt and edges of the fabric without being attached to that portion forming the roof lying between the seams. Furthermore, the fastening is such that the attachment is accomplished without any processes for the preparation of the ends of the ribs—such as heading, drilling, or punching—the plain rod being all that is necessary. I attain these and other objects by the constructions and combinations hereinafter described, and set forth in the drawings, in which—

Figure 1 is a side elevation of an umbrella embodying my device. Fig. 2 is an enlarged view showing one rib and my fastening device. Fig. 3 is a detail, partly in section, of the same. Fig. 4 is a detail showing the method of forming the welt in the seams of the cover. Fig. 5 is a detail of my device, showing part of cover with welt inserted; and Figs. 6 and 7 are modifications.

Like parts are represented by similar letters of reference in the several views.

In the drawings, a represents the cover, the seams of the several parts of which are preferably formed by turning the edge of one part on itself and that of the adjacent part being similarly turned so as to embrace the other, (see Fig. 4,) the parts being sewed together at a', forming the welt a^2, to which my fastening is attached; but it will be apparent that this welt may be formed in any suitable manner to make the attachment hereinafter described.

The fastening is preferably formed of a single sheet of metal having the flanged or closed end b, the rounded portion b', terminating in the corners b^2, and the extending portion b^3, rounding outwardly and then inwardly to grasp that portion of the welt next to the cover, the outward portion of the welt being folded and confined within the extending portion b^3 of the fastening, said extending portion thus grasping and confining the welt and holding the cover, the corners b^2 protecting the welt from the rib c, which extends into the rounded portion b' and rests against the closed end b.

It is obvious that the fastening may be formed in different ways to hold the welt and keep it separate from the rib, and in Figs. 6 and 7 I have shown two modifications of same. In Fig. 6 I have shown a fastening with straight sides, one side of which, at its grasping edge, is turned inwardly upon itself, forming the jaw b^4, and then rounding at b^5 within the fastener until it reaches the opposite side, when it is turned inwardly with said side and forms the jaw b^9, this construction giving the separate chamber b^6 for the rib.

In Fig. 7 I have shown the sides formed in a slightly-reverse curve, one side turned inwardly upon itself, forming a jaw b^4, then follows said side on one limb of said reverse curve, when it is turned rounding at b^7 transversely to the fastening, forming a barrel-like chamber b^8 for the rib, and then follows the opposite side of the fastening, which terminates in the jaw b^9.

It will be seen that I have not only provided means whereby the ribs may be formed with plain outer ends to simply extend into the fastening and the cover is held free of this rib, as hereinbefore stated, but the construction is such that the cover is readily removable, there being no permanent attachment by sewing or otherwise.

Having thus described my invention, I claim—

1. The combination with the welt of the seam of the cover and the supporting-ribs for the cover, said ribs having plain outer ends, of the fastener composed solely of a single metallic sheet, formed into a clamp arranged substantially in two hollow parallel portions with

flanged outer ends, the clamping portion to engage and confine said welt and the other portion to receive and hold the plain ends of said ribs, substantially as specified.

2. The combination with the welt of the seam of the cover and the supporting-ribs for the cover, said ribs having plain outer ends, of a fastener composed of a single metallic sheet formed into a clamp, having indented sides, substantially dividing it into two hollow parallel portions, with closed outer ends, the clamping portion to engage and confine said welt and the other portion to receive and hold the plain ends of said ribs, substantially as specified.

3. The combination with the welt of the seam of the cover and the supporting-ribs for the cover, said ribs having plain outer ends, of a fastener composed of a single metallic sheet formed into a clamp, one side being inwardly folded back and extended across the interior, dividing the fastener into two hollow portions with closed outer ends, the clamping portion to engage and confine said welt and the other portion to receive and hold the plain end of said ribs, substantially as specified.

In testimony whereof I have hereunto set my hand this 2d day of January, A. D. 1902.

AUGUSTUS G. STOUDER.

Witnesses:

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EDWIN E. EDGAR.