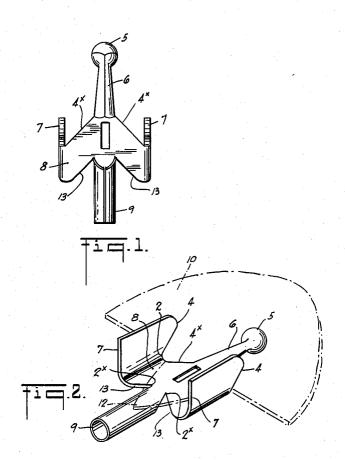
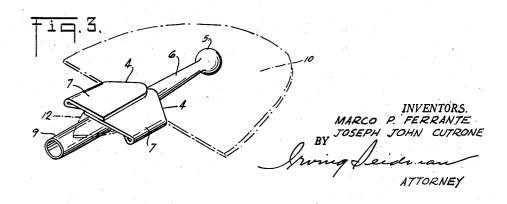
UMBRELLA FABRIC CLASP Filed June 1, 1950





UNITED STATES PATENT OFFICE

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UMBRELLA FABRIC CLASP

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2 Claims. (Cl. 135—36)

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This invention relates to umbrella fabric clasps, by which is meant the metallic clasp as described and shown in pending patent application, Serial No. 115,929, filed September 15, 1949, for securing the fabric to the tips of the umbrella ribs. The advantages of the said clasp over the heretofore practice of sewing the fabric to the ribs usually through apertures provided at the tips of the ribs are fully set forth in the aforesaid application, wherein the novel clasp is fully described, and an apparatus shown and described for securing the fabric to the ribs by means of the clasps.

One of the objects of the instant invention is to improve the said clasp; one manner in which the clasp is improved herein is that the edge of the umbrella fabric can be inserted to a further extent into the improved clasp of this invention, as will be fully described in the following specification, wherein further improved features will be pointed out.

For the attainment of the foregoing and such other objects that may appear or be pointed out herein, we have shown a preferred embodiment of our invention in the accompanying drawings, wherein:

Fig. 1 is a bottom view of the improved clasp, i. e., with its wings in downward position.

Fig. 2 is a top view of the clasp which is placed at the edge of the umbrella fabric, and

Fig. 3, likewise a top view, shows the clasp with 30 its wings folded in overlapping relation.

The improved clasp, shown in Figs. 1 and 2, before securement to the umbrella fabric, is fabricated from metal of the proper thickness and characteristics to permit the clasp to be stamped 35 from a single blank, and also to permit the same to be firmly secured to the umbrella fabric by bending over certain parts of the clasp (as will be described). As thus fabricated from the blank, the clasp has a tubular portion 9 at one end, 40 to one another. which is made of such diameter that this end of the clasp will readily fit over the plain end of the frame rib. The clasp also has a flat body portion 8, which is bent up at both sides to form wings 7, 7. Before securement to the umbrella 45 fabric, and as shown in Fig. 2, wings 7, 7 project upright and normally to flat portion 8.

between the aforesaid tubular portion 9 and a tip portion 6 which terminates in a sphere 5. The end of the clasp at portion 6 and sphere 5 will be referred to as the "tip" end of the clasp because when finally secured to the umbrella fabric and to the ribs, this end of the clasp constitutes the tip of the ribs. The end of the clasp end of the ribs.

at tubular portion 9 will be referred to as the "rib" end of the clasp because this end of the clasp is attached to the ribs of the frame.

That is, the final disposition of the fabric-secured and rib-attached clasps, the rib end 9 is next to the umbrella rib and the tip end 5 constitutes the tip end of the rib. But in the step of securing the clasp to the umbrella fabric, the clasp is disposed in the opposite direction. That is, the clasp is not presented to the fabric with the rib end 9 leading, but rather with the tip end 5—8 leading, as is shown in Fig. 2, wherein the umbrella fabric is designated 10, its edge being designated 11.

The two wings 7, 7 are provided at the edges thereof which are presented to the edge 11 of umbrella fabric 18 with a cut away portion as shown by the downwardly inclined line 4, 4 which intersects the flat portion & at its lower end. Additionally, the flat portion 8 is provided at the edge presented to the fabric, Fig. 2, with a pair of similar cut-outs, one close to each of the wings 7, 7 which cut-outs are shown by the inclined lines 4×, 4× at this end of flat portion 8. It will be noted from Fig. 2 that the cut-out line 4 of the wings and cut-out line 4× of flat portion 8 meet at corner 2. As a result of the two cooperative wing and flat portion cut-outs 4 and 4×, respectively, a considerable amount of the fabric can clear therein to present a bunched or gathered portion 12 of the fabric between the two upright wings 1, 1.

Referring to Fig. 2, the front ends of wings 8, 8 are not cut away (as are the other ends, at 4, 4). However, the flat portion 8 is cut away as indicated by the inclined lines 13, 13 which meet the tubular portion 9 at points 2×, 2×. It will be observed from this figure that the cut-away inclined lines 4× and 13 are substantially parallel to one another

After the gathered fabric 12 is placed on flat portion 8 of the clasps, its pair of wings 7, 7 are bent over, as shown in Fig. 3, to confine the gathered fabric between the clamped flat portion 8 and wings 7. In this position of the secured clasp, Fig. 3, its "tip" end 5—6 points towards the tip of the umbrella T and its "rib" end 9 points toward the handle thereof. Thereafter the secured clasp, such as is shown in Fig. 3, is turned 180° upon itself so that its "tip" end 5—6 will now point in the proper direction, towards the handle and its "rib" end 9 will point towards the umbrella tip. In this orientation of the clasp, its tubular "rib" end 9 is placed or snapped over the end of the rib

It is understood that the tubular ("rib") end 9 of the secured clasp is snapped onto the end of the rib under tension, which is made possible by the resiliency of the umbrella ribs. It will thus be evident that there is imposed a force upon the clasps which urges it away from the rib tips, which tends to pull the clasps away from the gathered portions 12 of the fabric. By turning the secured clasps 180° as explained, the tendency of the clasps to pull away from the fabric is 10 further thwarted; this outward force is now exerted by the turned clasp at a point somewhat inwardly of the edge of the fabric.

We claim:

1. A clasp for connecting a fabric to the ribs 15 of an umbrella, comprising a rib-engaging member having a tubular inner end portion and an outer ornamental end portion connected by an intermediate portion, the tubular inner end portion being open at both ends and adapted to receive the end of the rib, the tubular outer end portion being closed at its outer end, the intermediate portion consisting of a plate-like body extending transversely of said tubular portions and projecting from the opposite sides thereof 25 and having end portions bent upwardly and forming clamping wings folded downwardly toward each other to a clamping position in overlying relation to the body, the portions of the body projecting from the sides of said tubular end $_{30}$ portions having parallel diagonally extending inner and outer side edges, said wings having diagonal outer side edges conforming to and registering with the diagonally extending outer side edges of the body when the wings are in a 35 clamping position, the inner side edges of said

wings extending at right angles to the longitudinal axes of the tubular end portions and across the space between the sides of the inner tubular portion and the diagonally extending inner side edges of the body.

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2. A clasp for connecting a fabric to the ribs of an umbrella comprising a tubular inner end portion and an outer ornamental portion connected by a plate-like intermediate body portion, the tubular inner end portion being adapted to receive the rib, said body portion having portions projecting from the opposite sides of the tubular portions, said projecting portions having side edges extending diagonally from their intersection with the ends of tubular portions, the ends of said projecting portions being bent to form upstanding clamping wings, said wings being bendable downwardly to a clamping position in which they extend toward each other and have their ends overlapping.

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