J. C. HURCOMBE.

Clasp-Tip for Umbrella-Cover.

No. 198,621. Patented Dec. 25, 1877.

Fig. 1.

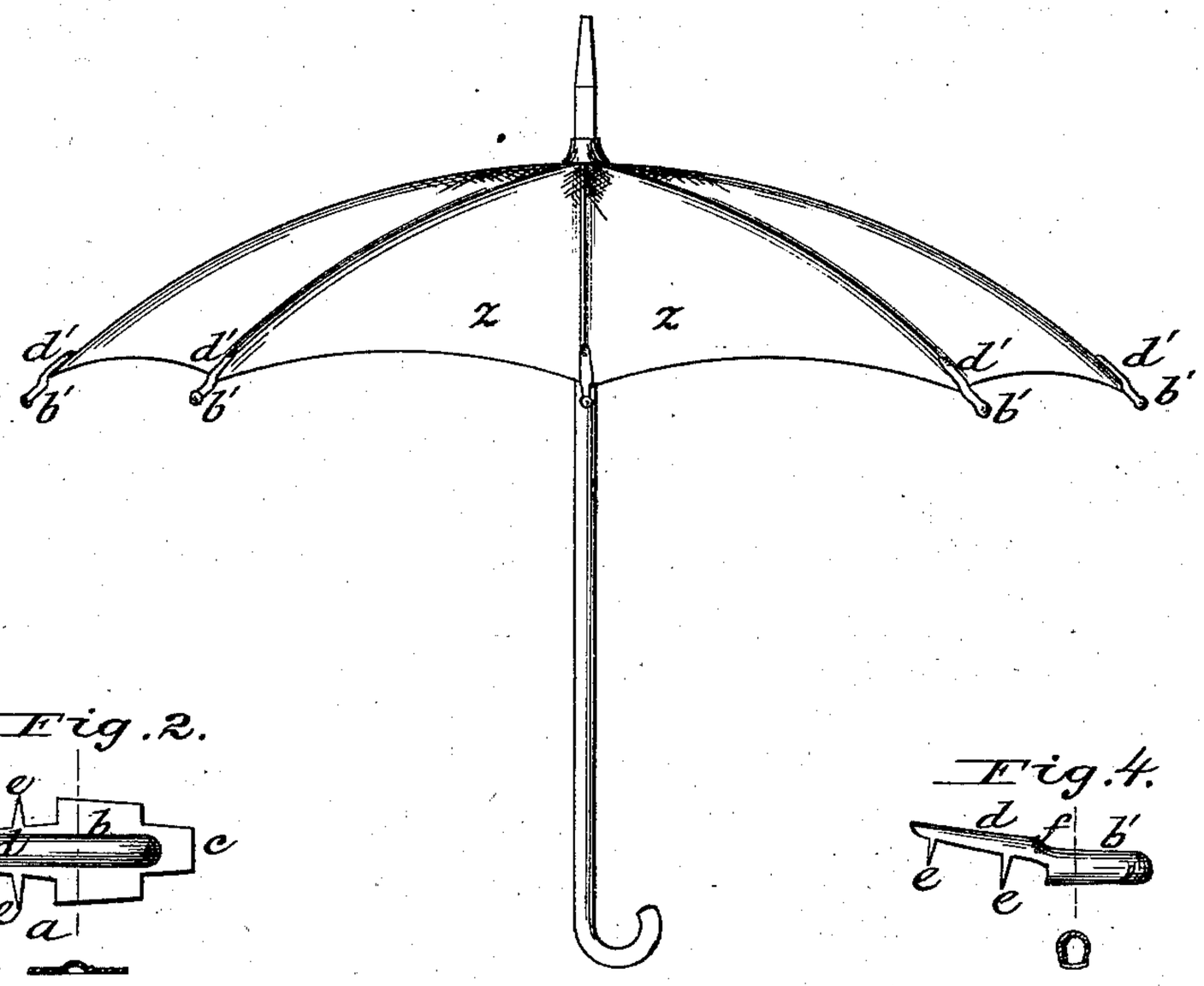


Fig. 2.

Fig. 3.

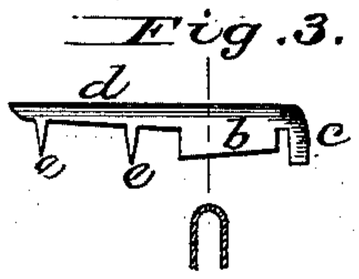


Fig. 4.

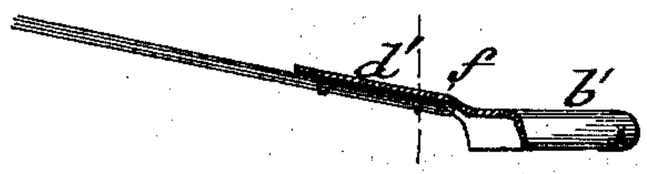


Fig. 5.

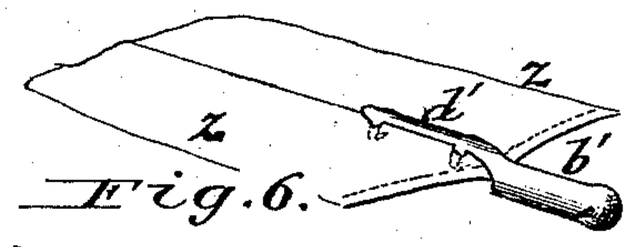
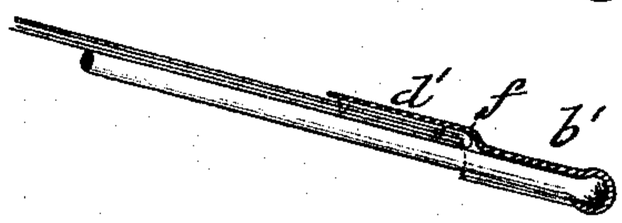


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN C. HURCOMBE, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF HIS RIGHT TO DANIEL C. DAWES, OF SAME PLACE.

IMPROVEMENT IN CLASP-TIPS FOR UMBRELLA-COVERS.

Specification forming part of Letters Patent No. **198,621,** dated December 25, 1877; application filed December 10, 1877.

To all whom it may concern:

Be it known that I, JOHN C. HURCOMBE, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Umbrellas; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of my invention is to produce a simple and substantial clasp-tip for securing umbrella-covers to their ribs, and avoid the expense and labor of sewing or tying the cloth to the ribs, as now practiced generally by the trade, while at the same time I dispense with the usual eye in the rib to receive the tying or sewing, and in this particular alone I save the cost of making the eyes, which is about equal to the entire cost of making and applying my new clasp-tip.

I make my clasp-tip of a single piece of thin sheet metal, which, when completed, is tubular at one end to receive the end of the rib, and the other end is open and provided with pin-points, similar to hoop-skirt clasps, by which the tip is secured to the sewed seam of the cover independent of the frame, and in a manner to prevent the usual creasing or folding at the ends of the gores, and making a better fit for the cover.

My clasp-tip also embraces a new method of manufacture by which it is produced, being first cut or stamped out in blank, and by several separate and distinct operations it is partly finished for being clasped to the cover by means of the pin-points, and then by a final operation it is secured to the end of the rib, so that the attachment is strong and durable, as the pin-points pass through and are clasped to the several thicknesses of the seam, while the small straight tube end is clasped over the ball end of the rib, making at the same time a perfect finish.

By this construction and method of forming and applying my new clasp-tip I am enabled to effect a saving of from thirty to forty per cent. of the cost of manufacturing in the usual way, and obtaining in the simplest way a beauty of finish and strength hitherto unobtained by any of the devices for the same purpose known to the trade.

Referring to the drawings, Figure 1 represents an umbrella with my new clasp-tip for uniting the cover and the ribs; Fig. 2, the cut blank, partly formed, for the clasp-tip; Fig. 3, the blank still further formed into the clasp-tip; Fig. 4, the tip formed ready to apply to the cover and rib by separate operations; Fig. 5, a section through the clasp-tip as applied to the cover, and Fig. 6 a similar view of the clasp-tip as applied to the cover and the rib and finished. This figure also shows a perspective of the tip-clasp as applied to the cover.

I cut or stamp from a sheet of thin metal the blank *a*, (shown in Fig. 2,) of the form required for the completed clasp-tip, and having a wide part, *b*, for forming the small end tube, the part *c* for closing the end of the tube, and the part *d*, having the pin-points *e*, and forming the open cover-clasp.

As at present devised, the machinery is adapted to form the blank partly into a tube, and the pin-points at right angles to the open clasp part, as shown in Fig. 3, and subsequently close the end *c*, as shown in Fig. 4, and then finishing the tip by completing the tube and forming the neck and knob or ball when applied to the rib; but I contemplate accomplishing the several operations by machinery requiring a less number of distinct operations or steps in the method of forming the clasp-tip. The pin or open part sets off from the tube, as shown at *f* in Fig. 4, to form a recess or hollow to receive the seam of the gores, and this offset is formed at the operation of closing the end of the tube. The clasp-tip in this condition is only partly finished, but is complete for the trade, and is applied to the cover in this state, as shown in Figs. 5 and 6, by simply placing the seam of the gores over the pin-points, and closing them toward each other over the under side of the seam, and embrace the several thicknesses of cloth which form the seam of the gores, as shown in Fig. 5. The pin-points *e*, for this purpose, are formed on the edges of the open part *d*, so as to be turned at right angles to said open part

to receive the fabric. In this way the cover is finished with the clasp-tips, each of which is then applied to the metal ribs by inserting the end of the rib in the partly-finished tube. A single operation then completes the tip by closing the tube entirely, and forming the neck and the knob or ball over the ball end of the rib, as in Fig. 6, thereby forming a secure and durable fastening for the tip, while the pin-points give a strong and permanent security to the cover, so that it is impossible to separate them without breaking or cutting them. The offset of the gore part of the clasp-tip gives the advantage of a smooth set to the cover by receiving in its recess or hollow side the seam, so that all wrinkling or furrowing at the ends of the gores is avoided, and the ends of the gores are thereby free from the usual bulkiness caused by doubling the cloth around the ribs.

My clasp-tip may be nickel-plated, japanned, or finished in any suitable manner or color, and gives a greatly-increased beauty of finish to the umbrella or parasol.

The device is light, and adds no perceptible weight, being about twelve to eighteen hundred to the pound.

As an article of manufacture, the clasp-tip is complete for the trade as finished in Fig. 4, in which the clasp-points are formed to receive the cover, and the tube end left slightly open at the edges of the part *b* to receive the end of the rib, so that the purchaser can readily apply them. The part *b c* forms the tube-tip *b'*, and the part *d e* the clasp *d'* for the gores.

I claim—

1. A clasp-tip for umbrellas and parasols, having a tubular end to receive and hold the rib, and an open part provided with pin-points, to receive and clasp the seam of the gore, substantially as herein set forth.

2. A clasp-tip for umbrellas, having a tubular end and an open part provided with clasping-pins, said pin-point open part having an offset or bulge from the tubular part, and formed with a recess or hollow to receive and hold the seam of the gore, and to form a smooth set to the cover.

3. A clasp-tip for umbrellas, secured to the seam of the gores by the pin-point clasps, and to the rib end by the closed tube forming the neck and the hollow knob, substantially as herein set forth.

4. As a new article of manufacture, a clasp-tip for umbrellas, made in one piece, of thin sheet metal, and having a tubular portion open to receive the rib, and a recessed or hollow offset part, with pin-points properly set to receive and clasp the seam of the gore, substantially as specified.

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

JOHN C. HURCOMBE.

Witnesses:
A. E. H. JOHNSON,
J. W. HAMILTON JOHNSON.