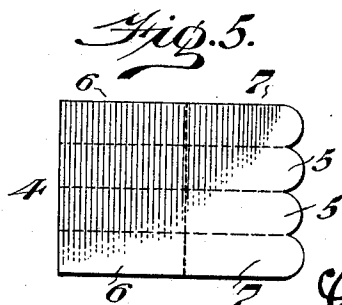
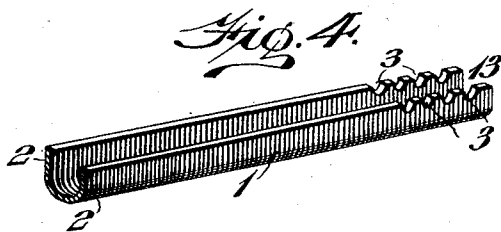
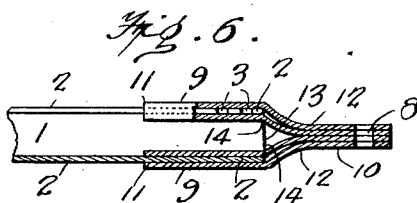
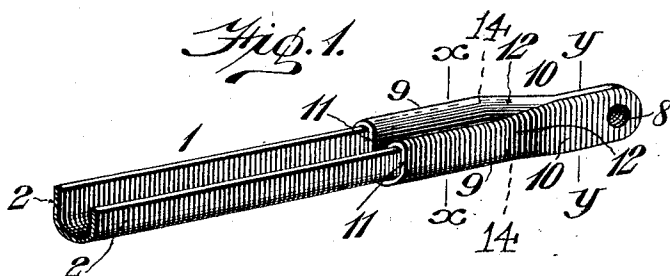


C. F. WURSTER.  
 UMBRELLA BUTT.  
 APPLICATION FILED JULY 29, 1910.

997,029.

Patented July 4, 1911.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## UMBRELLA-BUTT.

997,029.

Specification of Letters Patent.

Patented July 4, 1911.

Application filed July 29, 1910. Serial No. 574,520.

*To all whom it may concern:*

Be it known that I, CHARLES F. WURSTER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Umbrella-Butt, of which the following is a specification.

This invention relates to the rib and stretcher members of umbrellas, and more particularly to a new and novel butt construction, whereby a non-corrosive rib or stretcher butt is formed, simple and efficient in operation and possessing features of strength and durability.

In ribs or stretchers as heretofore constructed, it has been proposed to form a butt by inclosing the end portion of the steel bar in a non-corrosive covering, but in practice such devices have proven unsatisfactory and impractical, due to the fact that the butt so formed, is entirely too wide to fit the standard notch or runner and therefore the notches of the collar and runner of necessity must be widened, the result being a weakened material around the notched portion.

In my present invention I have devised a butt, simple in construction, inexpensive to manufacture, of substantially the same size and shape as the regular butt and one which cannot corrode and one which has all of its exterior side surfaces rounded, thus avoiding the presentation of raw edges, as heretofore practiced, and there is an increase of strength in the butt especially in the eye portion thereof.

It further consists of other novel features of construction, all as will be hereinafter fully set forth.

For the purpose of illustrating my invention I have shown in the accompanying drawing one form thereof which is at present preferred by me, since the same has been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described.

Figure 1 represents a perspective of a rib butt embodying my invention. Fig. 2 represents a section on line  $x-x$ , Fig. 1. Fig. 3 represents a section on line  $y-y$ , Fig. 1.

Fig. 4 represents a perspective view of a portion of a rib showing details of construction. Fig. 5 represents a blank for forming a portion of my invention. Fig. 6 represents a partial plan view and a partial longitudinal section of the complete device shown in Fig. 1.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings: 1 designates the end portion of an umbrella rib, the same being preferably formed of rolled metal and of substantially channel-shaped cross-section having the oppositely disposed sides or side flanges 2. Adjacent one end of the rib 1, each side 2, in the present instance, is provided with a plurality of notches or nicks 3, which comprise a holding or retaining means for a cooperating part of the butt construction. This part, as here shown, is formed from a blank 4, preferably of brass or like material, adapted to be bent around the end of the rib 1, it being especially noted that a portion of the said blank is adapted, when the parts are in assembled position, to extend beyond the end of the rib 1. In assembling the parts, the blank is pressed around the rib, so that its side members 6 are turned inside of the channel or U-shaped rib and the parts are then securely pressed together by suitable mechanism, to interlock said blank with the nicks 3 of the side flanges of the rib, the portions of the blank that now embrace the rib being of the form of a channeled sleeve 9 whose terminal is at the terminal of said sleeve and does not enter the eye portion and thereby thicken the same, but leaving it comparatively of the original thickness of the eye portion of the rib in the normal condition of the latter.

Especial attention is directed to the manner in which the projecting portion 5 of the non-corrosive blank 4 is shaped, since the same projects a sufficient distance beyond the end of the rib to form the butt proper. The outer portions 7 of the blank are each bent inwardly and turned downwardly into juxtaposed position and then pressed closely together, as seen at the right of Fig. 1 and in Fig. 3, the said members 7 being thus pressed into close contact to form the flattened portion 10 through the four thicknesses or folds of which is the eye or opening 8. It will thus be seen that the eye por-

tion is formed by an extension separate and distinct from the rib 1 and consists entirely of the non-corrosive material of which the blank 4 is formed and is of a thickness determined by the material itself, since no part of the rib is inclosed by said eye portion.

The rib as such has a blunt end 13 which occupies a position intermediate of the sleeve 9, and the flattened eye portion 10, the former being composed of two side members 11, and the latter of two side members 12, each bent on itself forming a plurality of thickness of material on each side the bends of each pair of side members being on the exterior of the eye portion, it being noticed that the edges of the sleeve and eye portion are folded inwardly, and all of the corners of said sleeve and eye portion are rounded, thus avoiding the presentation of sharp and raw edges in the device. The members 12 converge from the members 11 leaving shoulders 14 at the places of junction of said members 11 and 12. Against said shoulders the abrupt-terminating or blunt-ends 13 of the rib is thrust as a firm support therefor. It will be noticed, furthermore, referring to Fig. 6, that the terminal of the rib is at the end of the body of the sleeve, where the latter is gradually reduced or bent into the form of a tapering neck 12, continuous of which latter is the eye portion 10, consequently, there is no projection of the rib into the side flanges of said eye portion, otherwise there would be six thicknesses of material at said eye portion, hence as there are but four thicknesses thereat, said portion is not thickened by the rib occupying the same, which otherwise would increase the width of the slots or notches of the collar of the umbrella to receive the same or necessitate specially-constructed collars to accommodate the in-

creased thickness of the eye portion, to obviate which is an important feature of my invention. Furthermore the infolds of the eye portion of the sleeve have their terminals within the outer sides of said portion. This places the raw edges inwardly between said sides where they are covered and concealed. This produces bends on the exterior of said portion, and this with the continuous other parts of the portion presents curved surfaces on the entire exterior of the eye portion which will not cut or chafe anything coming in contact thereof, the same being true of the portion of the sleeve that embraces the butt end of the rib or stretcher member. It will thus be seen from the foregoing, that I effectually prevent corrosion at the end of the rib or stretcher and rusting of the same at and adjacent to the point of pivotal connection, which is the point where deterioration and damage are apt to occur, because of the rusting of the rib metal, resulting from the frequent dampness to which it is subjected.

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

The combination with an umbrella member substantially U-shaped in cross section and notched at one end, of a butt member having a portion bent around the notched end of said umbrella member with portions within the same and interlocked with said notches, said butt extended beyond the end of the umbrella member and folded twice upon itself forming a thin neck extended beyond the end of the said member and tapered, the doubled portions being provided with an opening.

CHARLES F. WURSTER.

Witnesses:

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