Aug. 27, 1940. T. D. PALMER ET AL 2,212,949

UMBRELLA SAFETY DEVICE

Filed May 6, 1938

Fig. 2

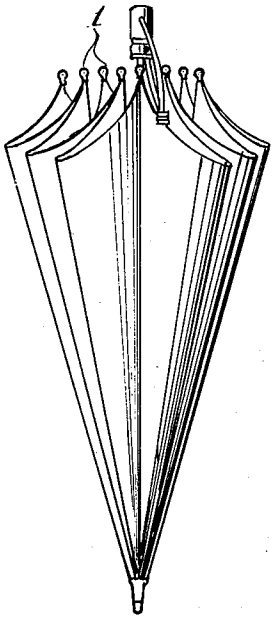


Fig. 1.

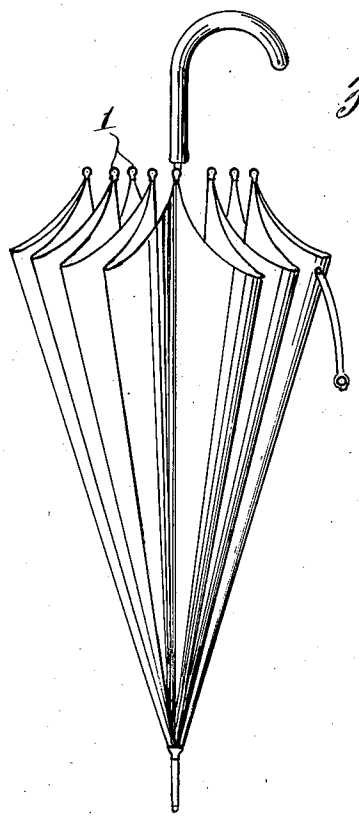


Fig. 4

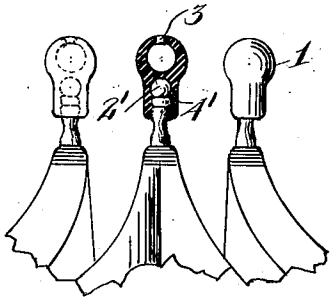
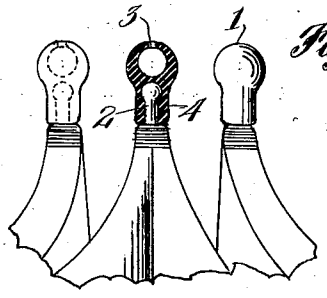


Fig. 3.



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Patented Aug. 27, 1940

2,212,949

UNITED STATES PATENT OFFICE

2,212,949

UMBRELLA SAFETY DEVICE

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Philadelphia, Pa.

Application May 6, 1938, Serial No. 206,333

2 Claims. (Cl. 135—36)

This invention relates to umbrellas, parasols and the like and is particularly concerned with a safety device fitted over the outer ends of the umbrella ribs.

One of the important objects of the invention is to provide an umbrella safety device which will prevent any serious injury, should the exposed umbrella tip, commonly made of steel or some hard composition, strike the eye or face of another. In general, it is useful when the tip is brought into contact with a person or with an object, for example, another umbrella, as even a light blow with these relatively sharp tips, might cause damage or injury.

With the above in mind, the invention contemplates use of a resilient cushion, rounded on the outer end, with relation to the umbrella rib, and mounted on said rib to receive and cushion shocks.

The device is further useful as a decoration and may be manufactured in any color desired as well as in a number of different shapes, so long as the shape is not such as to destroy the device's usefulness as a cushion.

A still further object is to provide a disengageable device such that the tips may be removed if desired and replaced with new ones. Conversely, new ones need not be purchased in case a rib should become damaged and have to be replaced.

How the foregoing objects are accomplished will be presented more fully hereinafter in the description making reference to the accompanying drawing, in which—

Figure 1 is a side view of an umbrella showing the mounting of our device on the ribs thereof;

Figure 2 is a similar view of a parasol, showing the devices mounted thereon;

Figure 3 is a view of a series of our devices mounted on the rib ends of an umbrella with one of the devices shown in section to illustrate the formation thereof; and

Figure 4 is a view similar to Figure 3 of a series of our devices mounted on the rib ends of a parasol.

The device is indicated generally in the drawing by the reference numeral **1**. In the form of Figures 1 and 3, the device is provided at its lower end with a shank portion **4**, having a rib receiving aperture therein, shown with the rib **2** inserted. Best results are obtained by forming the rib receiving aperture of substantial length so as to get a firm grip on the rib end. Furthermore, (referring to Figure 3) the aperture is preferably slightly larger at its inner end to accommodate the knob ordinarily provided on the umbrella rib and thus ensure against the two becoming inadvertently disengaged.

With reference to the shank portion, applicant points out that the aperture therein may be formed in various shapes to accommodate a variety of configurations of rib tips. A modified shape is shown in the form of Figures 2 and 4, wherein the shank portion **4'** is shown fitted on a more elaborate rib tip **2'**.

At the upper end is the cushion portion proper. This is somewhat larger than the shank portion, and is desirably generally spherical. The inside of this larger portion is preferably hollowed and provided with an aperture through the spherical wall, said aperture being indicated at **3** in both forms.

The safety device is made of resilient material such as rubber, and when the device is in use the narrower, apertured shank portion indicated at **4** or **4'**, and described above, is in frictional engagement with the umbrella rib tip **2** or **2'**.

Referring again to the spherical portion, bearing in mind the above description, it can readily be understood that the resilient sphere hollowed as shown will afford a substantial cushioning effect upon contact or impact with persons or objects.

We claim:

1. For an umbrella rib, a resilient safety device of the character described comprising a shank at one end of the device having a rib receiving hollow therein, and a hollowed cushion portion at the other end normally at substantially atmospheric pressure, the wall of said cushion portion being of semispherical form and defining the major part of a sphere, the interior of said shank and the interior of said hollowed cushion portion being separated by an intervening wall.

2. For an umbrella rib, a resilient safety device of the character described comprising a shank at one end of the device having a rib receiving hollow therein, and a hollowed cushion portion at the other end having an aperture through the wall thereof normally providing free communication of the interior of the cushion with the atmosphere, the wall of said cushion portion being of semispherical form and defining the major part of a sphere, the interior of said shank and the interior of said hollowed cushion portion being separated by an intervening wall.

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