April 10, 1945. D. HANNAN 2,373,471

UMBRELLA RETAINING DEVICE

Filed Oct. 23, 1944

Fig. 1.

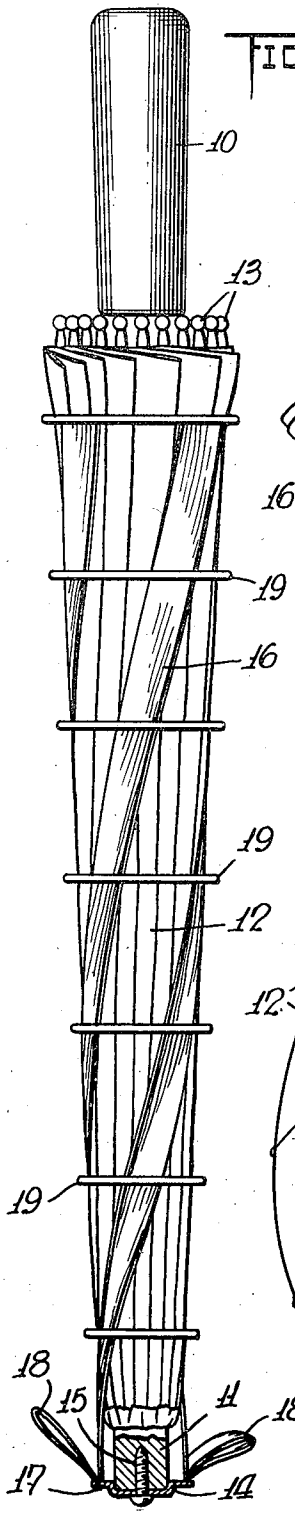


Fig. 2.

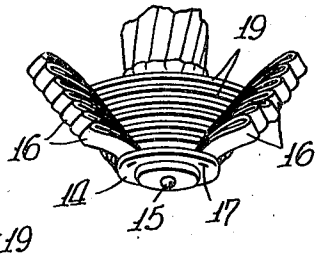


Fig. 3.

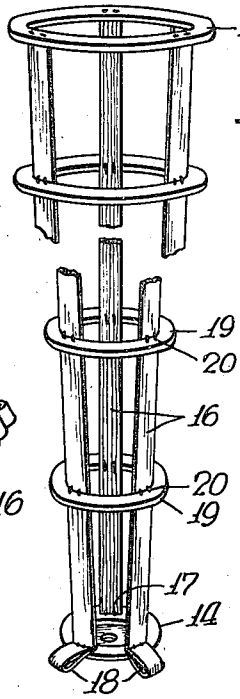
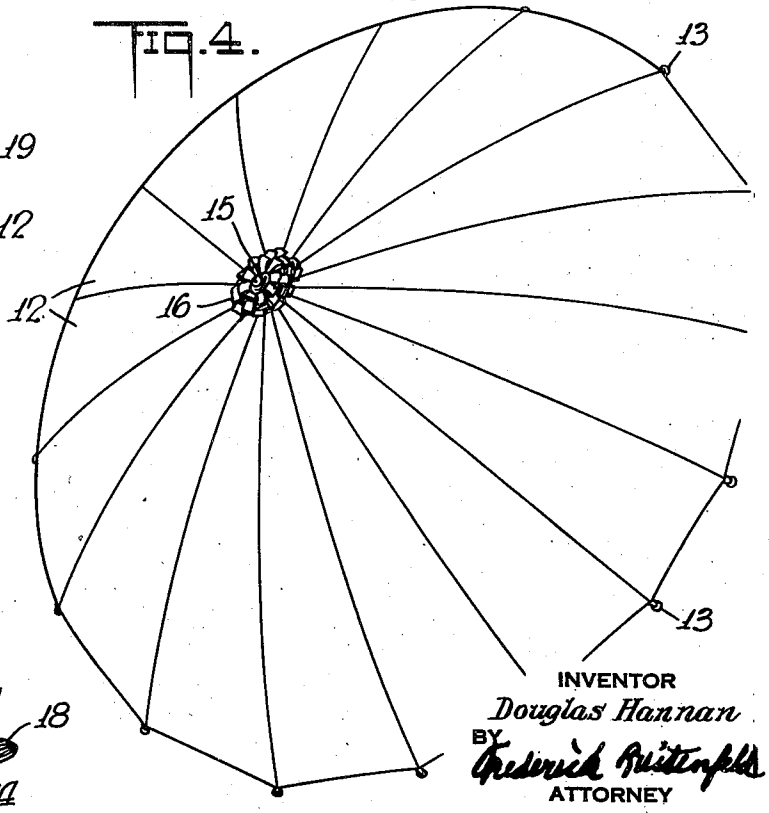


Fig. 4.



INVENTOR
Douglas Hannan
BY Frederick Ristenfeld
ATTORNEY

Patented Apr. 10, 1945 2,373,471

UNITED STATES PATENT OFFICE

2,373,471

UMBRELLA RETAINING DEVICE

Douglas Hannan, New York, N. Y., assignor to Comprehensive Fabrics, Inc., New York, N. Y., a corporation of New York

Application October 23, 1944, Serial No. 559,896

7 Claims. (Cl. 135—37)

My present invention relates generally to umbrellas, and has particular reference to an improved retaining device for engaging around the folds of the umbrella when the latter is closed.

A conventional expedient for holding the folds of an umbrella in place when the umbrella is closed consists of a strap or tape or equivalent element permanently fastened to the umbrella material and adapted to extend circumferentially around the folds in the region near the handle where the folds present the bulkiest mass of material. For such a device to function to best advantage, it is generally necessary to lay the folds neatly one upon the other, and this is a tedious and unhandy operation, especially when the umbrella material is wet. Often, the strain to which the strap is subjected will result in tearing it from the umbrella material, or tearing off the button or equivalent fastener with which it cooperates. At best, the folds of the umbrella are engaged at only the one region, and are likely in other regions to bulge outwardly in an unattractive manner.

Sometimes, as an alternative or added instrumentality for holding the umbrella in compact closed condition, a so-called umbrella cover is used which consists essentially of a tight-fitting tubular fabric adapted completely to envelop the umbrella folds. However, such a cover cannot be applied to a wet umbrella without retarding the desired process of drying; it constitutes an undesirable extraneous element when removed; and it is in any case an expedient whose application and removal involve cumbersome procedures which make its use annoying and unpopular.

It is a general object of the present invention to provide an umbrella retaining device of simplified and improved character which is not only devoid of the foregoing disadvantages, but which is easy and safe to use whether the umbrella is wet or dry, and which engages the umbrella material neatly and firmly, and helps to expel excess water in case the umbrella is wet. A secondary object of the invention is to provide a device having these desirable advantages and which, in addition, affords a unique means for producing ornamental effects and for distinctly enhancing the attractive appearance of the umbrella in both its closed and opened conditions.

The present improvement is one which may be inexpensively incorporated with an umbrella structure during its initial manufacture, yet it is of such a nature that it may be readily made and sold as a separate unit for association with existing umbrellas, especially women's umbrellas. Moreover, it may be easily removed and replaced in cases where a change in style or color makes such a substitution desirable.

Briefly stated, the invention resides in the provision of a plurality of separate rings, preferably of ornamental material and coloration, which are adapted to engage around the folds of the umbrella at longitudinally spaced positions along the umbrella, a flexible elongated tie element being secured at spaced intervals to successive rings and being anchored at one end to the umbrella tip. The tie element preferably assumes the form of an ornamental ribbon of suitably chosen kind and color, and in the preferred embodiment of the invention there are a plurality of such tie elements, for example, two, three or four, which engage each ring at circumferentially-spaced regions thereof. As a result, the rings may be adjusted into their operative fold-retaining spaced relationships when the umbrella is closed, the tie element or elements serving in a predetermined manner to limit the intervals between them; or the rings may be adjusted into proximity to form a compact group at the tip of the umbrella when the latter is opened. The parts are so designed and assembled that when the rings are brought into such proximity they form an ornamental stack, while the tie element or elements festoon outwardly between ajacent rings and thereby produce a strikingly ornamental pom-pon effect at the top center of the opened umbrella.

I achieve the foregoing general objects and advantages, and such other objects and advantages as may hereinafter appear or be pointed out, in the manner illustratively exemplified in the accompanying drawing in which:

Figure 1 is an elevational view of an umbrella having a retaining device of the present character associated therewith, the device being shown in operative condition, with the umbrella closed, and the lower portion of this figure being shown in cross-section;

Figure 2 is a fragmentary view of the tip portion of the umbrella with the retaining device shown in an adjusted position;

Figure 3 is a perspective view showing by themselves the essential elements of an illustrative retaining device; and

Figure 4 is a perspective view showing the umbrella in opened condition.

In the drawing I have chosen to illustrate a conventional type of woman's umbrella having a handle 10, an umbrella tip 11, and umbrella material 12 mounted on the usual collapsible frame which includes a plurality of ribs whose tips are indicated at 13.

In accordance with my present invention, there is secured to the tip 11 a disk-like element 14 which serves as the means for anchoring the present retaining device to the umbrella. I have illustratively shown how this element 14 can be secured to the umbrella tip 11 by means of an ordinary screw 15 which passes through a hole in the center of the element 14. This or any equivalent fastening means may be employed and if the anchorage is accomplished by means of a screw, as shown, it is obvious that the retaining device may be readily attached to any existing umbrella, and may with equal facility be removed or replaced.

Fastened to the margin of the element 14 are one or more flexible elongated tie elements and I have illustratively shown three such elements 16 in the present drawing. Each of them consists preferably of a ribbon of fabric or the like, one end of which is fastened to the element 14. The mode of fastening is a matter of choice, and I have illustratively shown the possibility of engaging each tape or ribbon 16 by means of stitches 17 which pass through preformed openings in the element 14. For ornamental purposes, the engaged end of each ribbon may be so arranged as to form a small loop 18 as shown most clearly in Figures 1 and 3.

At spaced intervals along its length, each tie element 16 is secured to a series of successive rings 19 which are adapted to engage around the folds of the umbrella material 12, as indicated in Figure 1, when the umbrella is closed. The rings 19 are of progressively larger size from the tip of the umbrella rearwardly (i. e., upwardly as viewed in Figure 1) to conform in a general way to the corresponding increase in external diameter of the folded umbrella material.

The tape or tapes 16 are preferably arranged so as to extend through the rings 19, and here too the method of fastening each tie element to successive rings is a matter of choice, although I prefer to employ stitches 20 which pass through the tie element and through preformed openings provided in the rings.

Where a plurality of tie elements are employed, which is the preferred construction as shown in the present drawing, the tie elements or ribbons engage each ring 19 at circumferentially-spaced regions of the latter.

Each of the rings 19, as well as the element 14, is made of rigid material, preferably a rustproof and corrosion-resistant material of light weight and attractive appearance, such as a synthetic plastic or the like. A flat type of ring construction is preferred, as shown in the drawing, and each ring has a substantially circular interior contour. The exterior edge is preferably of similar circular contour, as shown, although it may obviously be somewhat modified in shape for possible purposes of ornamentation or the like.

The rings are so designed that each one has an exterior dimension which is greater than the interior diameter of the next larger ring, thus avoiding any possibility of altering or disturbing the predetermined sequential disposition of the rings.

When the umbrella is closed, as shown in Figure 1, the folds are obviously held firmly and neatly against the stock of the umbrella. By a judicious selection of colors or other ornamentation, the assembly of rings and ribbons presents an attractive appearance, especially when the colors are so chosen as to harmonize in a pleasing manner with the kind and color of the umbrella material itself.

When the umbrella is to be opened, a slight pressure upon the largest ring will result in shifting or adjusting all rings into the form of a stack as indicated in Figure 2, thereby producing a compact group at the tip of the umbrela. During this adjustment each tie element will festoon outwardly between adjacent rings, the ultimate bundle of parts producing a pleasing and attractive pom-pon effect as indicated most clearly in Figure 4. (It will be understood that the parts will not usually adjust themselves in the exact alignment shown in Figure 2, and that the various festoons or loops will project in a variety of directions to produce the blossom-like effect which is desired.)

As in the case of the rings themselves, the end element 14 has an exterior dimension greater than the interior diameter of the adjacent ring, and there is therefore no possibility that any of the rings will advance beyond the tip of the umbrella, the group or stack always positioning itself substantially as shown in Figure 2 when the rings are adjusted into the proximity referred to.

After the umbrella is closed again, the parts may be readily adjusted back into the relationships shown in Figure 1. There is no necessity for painstakingly laying each fold of the umbrella material over the adjacent fold. The mere advancement of the rings toward the spaced relationship of Figure 1 will serve adequately to engage and retain the folds of the umbrella material. During this process, excess water will be automatically squeezed from the material and the end result is one which does not completely envelop the material and therefore does not impair the desired drying out of the umbrella.

In Figure 1 I have shown the ribbons 16 in a somewhat helical disposition with respect to the axis of the umbrella. It is not necessary that the tie elements be thus arranged, and they will generally be adjusted into the substantially longitudinal relationships shown in Figure 3. The showing of Figure 1 is intended to be merely illustrative of the ornamental possibilities which the invention affords.

In case of wear, it is a relatively simple matter to remove the present device from the umbrella, and this will leave the umbrella in its normal intact state, ready for use without the present ornamental retaining device. However, if a replacement is to be effected, or if a change in ornamentation or style is desired, the device may be replaced by another one of the same general type by the simple expedient of slipping the new rings over the end of the umbrella and securing the new element 14 to its tip.

In general, it will be understood that the details herein described and illustrated may readily be modified by those skilled in the art without departing from the spirit and scope of the invention as expressed in the appended claims.

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

1. The combination with an umbrella, of a plurality of separate rings adapted to engage around the folds of the umbrella when the latter is closed, a flexible elongated tie element secured at spaced intervals to successive rings, and means for anchoring said tie element to the umbrella tip, whereby said rings may be adjusted into longitudinally-spaced positions along the umbrella when the latter is closed, and into mu-

tual proximity to form a compact group at the tip of the umbrella when the latter is open.

2. The combination with an umbrella, of a plurality of separate rings adapted to engage around the folds of the umbrella when the latter is closed, a plurality of flexible elongated tie elements each of which is secured at spaced intervals to successive rings, said tie elements engaging each ring at circumferentially-spaced regions thereof, and means for anchoring said tie elements to the umbrella tip, whereby said rings may be adjusted into longitudinally-spaced positions along the umbrella when the latter is closed, and into mutual proximity to form a compact group at the tip of the umbrella when the latter is open.

3. The combination with an umbrella, of a plurality of separate rings adapted to engage around the folds of the umbrella when the latter is closed, a plurality of flexible elongated tie elements each of which is secured at spaced intervals to successive rings, said tie elements engaging each ring at circumferentially-spaced regions thereof, and means for anchoring said tie elements to the umbrella tip, whereby said rings may be adjusted into longitudinally-spaced positions along the umbrella when the latter is closed, and into mutual proximity to form a compact group at the tip of the umbrella when the latter is open, said tie elements being ribbons which festoon outwardly between adjacent rings when the latter are adjusted into proximity, thereby producing an ornamental pom-pon effect.

4. The combination with an umbrella, of a plurality of separate rings adapted to engage around the folds of the umbrella when the latter is closed, a flexible elongated tie element secured at spaced intervals to successive rings, and means for anchoring said tie element to the umbrella tip, whereby said rings may be adjusted into longitudinally-spaced positions along the umbrella when the latter is closed, and into mutual proximity to form a compact group at the tip of the umbrella when the latter is open, said rings being of successively larger sizes from the umbrella tip rearwards and each ring having an external dimension larger than the internal diameter of the next larger ring so that the adjustment of the rings into proximity will arrange them in the form of a stack.

5. The combination with an umbrella, of a plurality of separate rings adapted to engage around the folds of the umbrella when the latter is closed, a plurality of flexible elongated tie elements each of which is secured at spaced intervals to successive rings, said tie elements engaging each ring at circumferentially-spaced regions thereof, and means for anchoring said tie elements to the umbrella tip, whereby said rings may be adjusted into longitudinally-spaced positions along the umbrella when the latter is closed, and into mutual proximity to form a compact group at the tip of the umbrella when the latter is open, said rings being of successively larger sizes from the umbrella tip rearwards and each ring having an external dimension larger than the internal diameter of the next larger ring so that the adjustment of the rings into proximity will arrange them in the form of an ornamental stack, said tie elements being ribbons which festoon outwardly between adjacent rings of said stack thereby producing an ornamental pom-pon effect.

6. The combination with an umbrella, of a plurality of separate rings adapted to engage around the folds of the umbrella when the latter is closed, a flexible elongated tie element secured at spaced intervals to successive rings, and means for anchoring said tie element to the umbrella tip, whereby said rings may be adjusted into longitudinally-spaced positions along the umbrella when the latter is closed, and into mutual proximity to form a compact group at the tip of the umbrella when the latter is open, said tie element being a ribbon extending through said rings, said ribbon lying flat against the umbrella and serving to limit the longitudinal spacing of said rings when the umbrella is closed, said ribbon festooning outwardly between adjacent rings when the latter are adjusted into proximity.

7. The combination with an umbrella, of a plurality of separate rings adapted to engage around the folds of the umbrella when the latter is closed, a flexible elongated tie element secured at spaced intervals to successive rings, and means for anchoring said tie element to the umbrella tip, whereby said rings may be adjusted into longitudinally-spaced positions along the umbrella when the latter is closed, and into mutual proximity to form a compact group at the tip of the umbrella when the latter is open, said anchoring means comprising a disc secured to said tie element and to the umbrella tip and having an external dimension larger than the internal diameter of the adjacent ring, said rings being successively larger from the umbrella tip rearwards and each ring having an external dimension larger than the next larger ring, whereby the adjustment of the rings into proximity will arrange them in the form of a stack.

DOUGLAS HANNAN.