July 20, 1937. W. FARKAS 2,087,756

POWER TACKING DEVICE FOR UMBRELLAS

Filed June 15, 1936

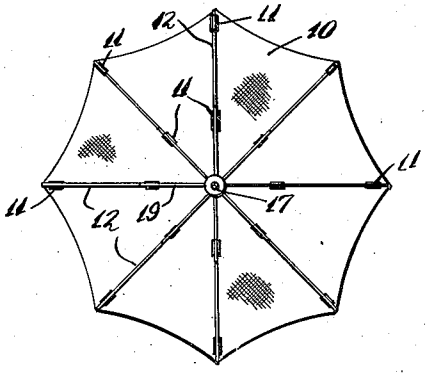

Fig. 1.

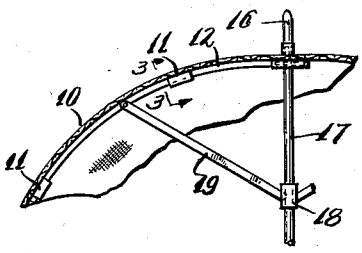

Fig. 2.

Fig. 5.

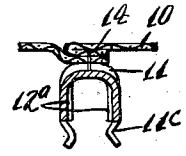

Fig. 3.

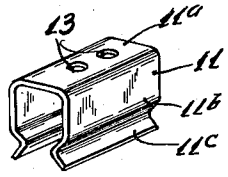

Fig. 4.

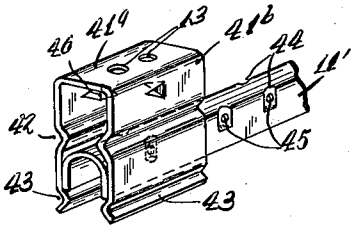

Fig. 8.

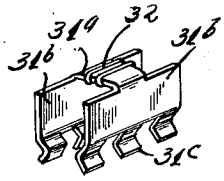

Fig. 7.

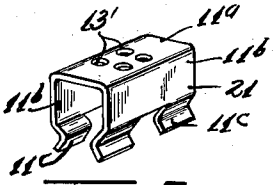

Fig. 6.

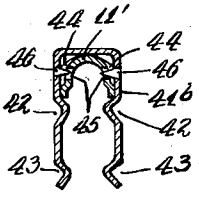

Fig. 9.

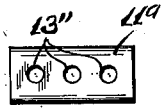

Fig. 10.

INVENTOR
William Farkas
BY Zoltan A. Polachek
ATTORNEY

Patented July 20, 1937

2,087,756

UNITED STATES PATENT OFFICE

2,087,756

POWER TACKING DEVICE FOR UMBRELLAS

William Farkas, Brooklyn, N. Y., assignor of one-third to Benjamin Nemeth and one-third to Morris Nemeth, Brooklyn, N. Y.

Application June 15, 1936, Serial No. 85,225

7 Claims. (Cl. 135—34)

This invention relates to new and useful improvements in a power tacking device for umbrellas, parasols, and the like.

The invention proposes the combination of an umbrella cover of cloth or similar material to which a plurality of clips have been secured with a sewing machine and which clips are adapted to be removably engaged on the rib frame of an umbrella or parasol. With this arrangement the umbrella cover may readily be removed from the frame when desired, or replaced or exchanged.

A further object of the invention resides in the specific construction of the clips so that they are adapted to be attached upon the umbrella cover with a conventional button sewing machine.

Still further the invention contemplates a particular coaction between the clips and the ribs by which the clips are prevented from moving longitudinally on the ribs.

Still further the invention proposes a construction of clips which may be slidable on the ribs and which, when desired, may be moved to a second position in which it is fixed against motion.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:—

Fig. 1 is a bottom view of an umbrella with clips mounted thereon according to this invention.

Fig. 2 is a fragmentary vertical sectional view of the umbrella shown in Fig. 1.

Fig. 3 is a fragmentary enlarged sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is a perspective view of one of the clips.

Fig. 5 is a fragmentary perspective view of a portion of the rib frame of the umbrella.

Fig. 6 is a perspective view of a modified clip.

Fig. 7 is another perspective view disclosing a still further modified clip.

Fig. 8 is another perspective view showing a still further modified clip applied to a portion of one of the ribs of the umbrella.

Fig. 9 is a transverse sectional view of the device shown in Fig. 8 but with the clip in a second position.

Fig. 10 is a plan view of one of the clips disclosing another modified form of the invention.

The power tacking device for umbrellas, according to this invention, comprises clips formed with openings simulating the openings of a button so that a power machine may secure each clip in position in the same manner in which a button is secured.

In Figs. 1 and 2 an umbrella is shown which comprises covering material 10 to which clips 11 have been attached. These clips are adapted to be engaged upon and removed from the ribs 12 of the frame of the umbrella. Each of the ribs 12 is of conventional U-shaped construction, as clearly shown in Figs. 3 and 5, except that portions 12^a of the ribs to which the clips are engaged are formed with depressed areas. These depressed areas form shoulders 12^b at the ends thereof. Thus, when the clips 11 are forced into position the edges of the clips engage these shoulders and so the clips are prevented from sliding.

The clip 11 is formed with apertures 13 upon the central portion thereof through which the needle of the sewing machine may pass during the stitching operation. In Fig. 3 stitches 14 are shown securing the clip 11 to the umbrella covering material 10. In Fig. 1 it should be noted that there are several clips on each of the ribs 12 of the umbrella so that the covering material is properly held. For example, on each rib there may be a clip at the extremity thereof and other clips intermediate of the ends. At the top of the umbrella the covering material should preferably be held in position by a removable cap 16 which is threadedly engaged upon the central rod 17 of the umbrella. The conventional tubular slide 18 is mounted on the central rod to which the reinforcing ribs 19 are pivotally connected at one of their ends and at the other of their ends they are connected with the ribs in the regular way. The details of the umbrella will not be given in this specification as such details are commonly known. The details of the sewing machine are also not given as button sewing machines are well known at the present time, and they are adapted to handle the clips identically in the same manner as buttons without any changes whatsoever.

Each of the clips 11 has a central portion 11^a which is provided with the apertures 13. This central portion connects with side arms 11^b which are adapted to extend along the sides of the umbrella rib. These side arms have edge portions 11^c which are bowed inwards and adapted to engage the edges of the umbrella rib so that the clip is resiliently held in position. When forced from position the side arms are merely caused to be bowed outwards by the

bulged portions 11c engaging the sides of the umbrella rib.

In Fig. 6 a modified form of clip is shown, indicated by the reference numeral 21, which distinguishes from the prior clip merely in the arrangement of the apertures 13' upon the central portion 11a thereof. The edge portion 11d is shown to be formed of two separate fingers. In other respects this clip is identical to the one previously described and similar parts may be recognized by the identical reference numerals.

In Fig. 7 another form of clip is shown which comprises a very narrow central or top portion 31a connected with side arms 31b. The lower portions of these side arms are formed with a plurality of bulged in portions 31c. The top portion 31a is of a width corresponding with the distance between the conventional button holes so that the sewing machine may secure the clip position by lines of stitches extending across the edges of the portion 31a. These stitches are indicated by the dot and dash lines 32.

In Figs. 8 and 9 a modified form of the invention has been disclosed in which there is a clip consisting of a central portion 41a connecting with side arm portions 41b. These side arm portions are formed with an intermediate bowed-in area 42 and with bottom bowed-in edge portions 43. The compass between the central bowed-in areas 42 and the edge bowed-in areas 43 is exactly sufficient to accommodate and receive the rib 11' of an umbrella. When the clip is engaged in this position on the rib it may be shifted longitudinally along the rib.

The rib 11' is formed with caved-in portions 44 which communicate with the top edge thereof and which connect with openings 45 in the side arms of the rib. The compass of the clip between the central portion 41a and the bowed-in side portions 42 is also sufficient to just receive the rib 11', as indicated in Fig. 9. The side walls of the clip are formed with stamped out prongs 46 which are directed inwards and which are adapted to engage the openings 45 in the rib. Thus, the clip may be forced downwards so that the prongs 46 first ride through the recessed portions 44 and then engage into the openings 45. Thus, the clip is held in a fixed position upon the rib and cannot slide. It is possible to remove and shift the clip to other desired positions.

The central portion 41a of the clip is formed with apertures 13 or a similar construction, by which it may be attached by a conventional button sewing machine upon the umbrella cover or similar element.

The position of the clip shown in Fig. 8 is merely a temporary one in which it is possible to slide the clip along the rib until it has reached its adjusted position after which it is forced down to the position shown in Fig. 9 in which the prongs 46 engage the openings 45 to hold the clip in fixed position.

In Fig. 10 the central portion 11a of the clip is shown with 3 apertures 13''.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

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

1. In an umbrella having a cover, a plurality of clips adapted to be attached to said cover, and umbrella ribs having depressions on opposite sides upon which said clips may be releasably engaged.

2. In an umbrella having a cover, a plurality of clips adapted to be attached to said cover, and umbrella ribs having depressions on opposite sides upon which said clips may be releasably engaged, each of said clips having a central portion with apertures for attaching said clips to said cover.

3. In an umbrella having a cover, a plurality of clips adapted to be attached to said cover, and umbrella ribs having depressions on opposite sides upon which said clips may be releasably engaged, each of said clips having a central portion with passage for fastening means to attach said clips to said cover.

4. In a device of the class described, a U-shaped umbrella frame rib having pressed in portions on opposite sides, a clip engaging said rib and disposed over said pressed in portions so that its edges engage the ends thereof and prevent longitudinal sliding.

5. In a device of the class described, a U-shaped umbrella frame rib having pressed in portions on opposite sides, a clip engaging said rib and disposed over said pressed in portions so that its edges engage the ends thereof and prevent longitudinal sliding, said pressed in portions forming shoulders with the material of the rib at the ends of the pressed in portions, and the edges of said clips being adapted to engage said shoulders.

6. In a device of the class described, a U-shaped umbrella frame rib having depressions formed with apertures on opposite sides, a clip engaging said rib, each clip comprising a back portion with apertures by which it may be sewed to a device of the class described, said clip also having side arms, said side arms being formed with central bowed in portions and each bowed in portion arranged so that the clip may be engaged on the umbrella rib in one or a second position, and prongs projecting from said side arms and adapted in one position of the clip to engage said apertures formed in the sides of said umbrella rib.

7. In a device of the class described, a U-shaped umbrella frame rib having depressions formed with apertures on opposite sides, a clip engaging said rib, each clip comprising a back portion with apertures by which it may be sewed to a device of the class described, and clip also having side arms, said side arms being formed with central bowed in portions and each bowed in portion arranged so that the clip may be engaged on the umbrella rib in one or a second position, and prongs projecting from said side arms and adapted in one position of the clip to engage said apertures formed in the sides of said umbrella rib, said umbrella rib having recessed portions communicating with said apertures.

WILLIAM FARKAS.