Jan. 7, 1930. A. McLEAN 1,743,043

FOLDING UMBRELLA

Filed July 23, 1928 2 Sheets-Sheet 1

Fig. 1.

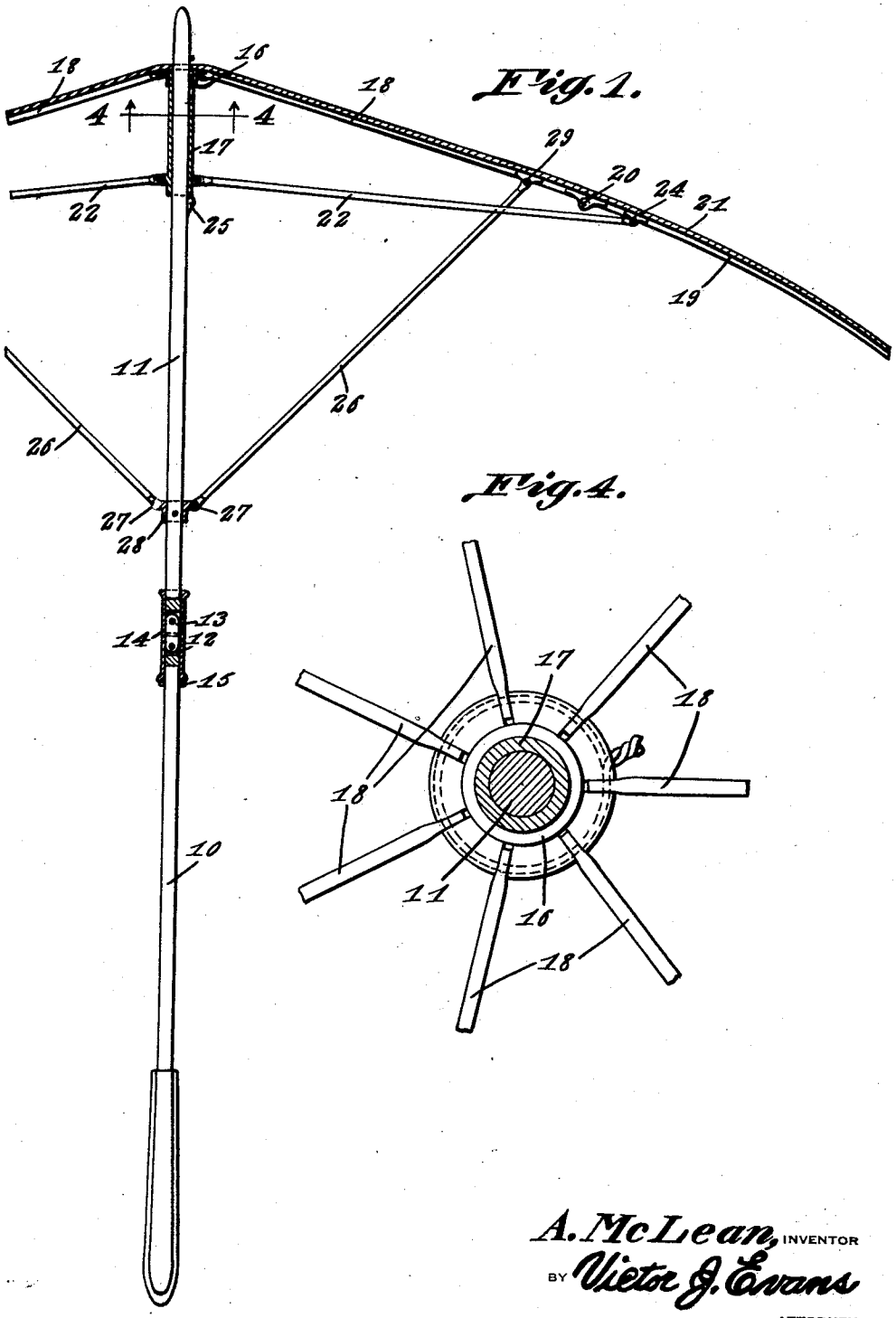


Fig. 4.

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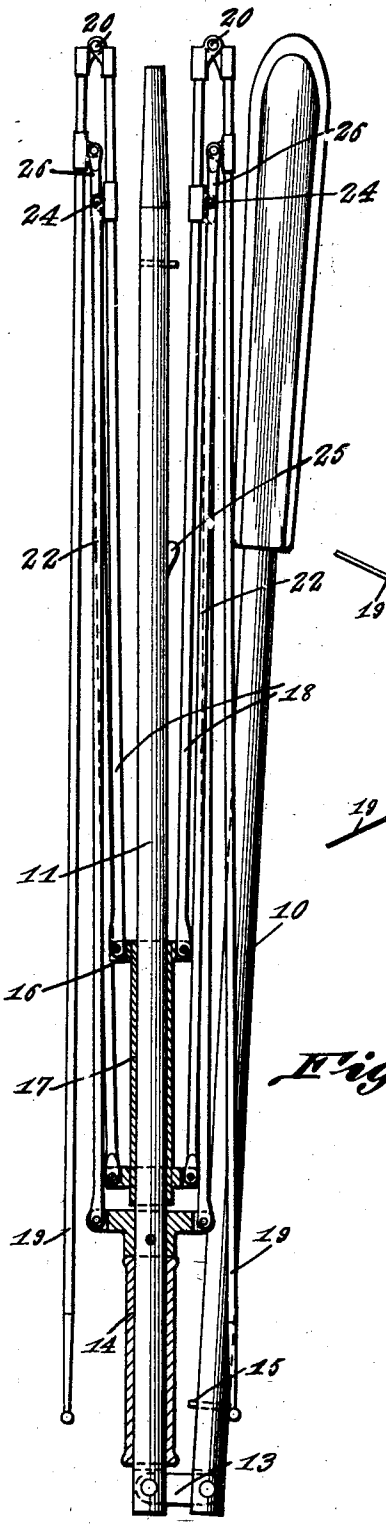


Fig. 2.

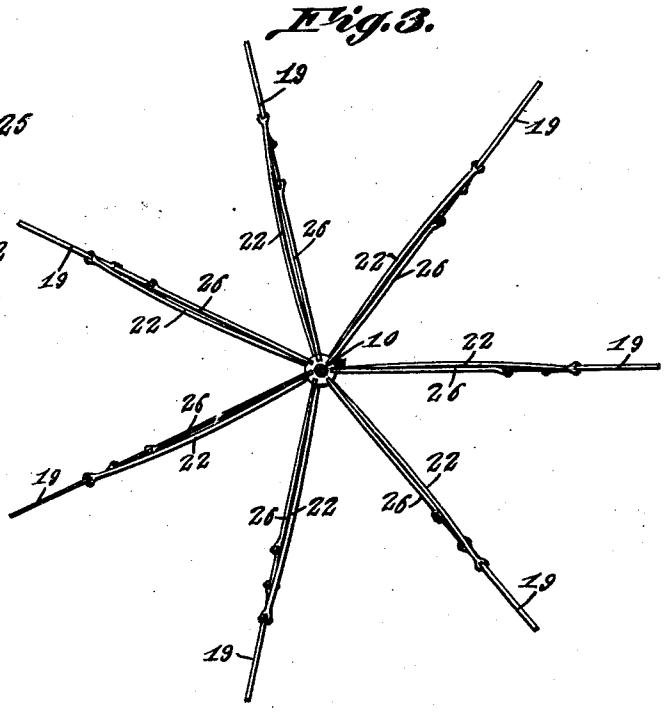


Fig. 3.

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Patented Jan. 7, 1930 1,743,043

UNITED STATES PATENT OFFICE

ARTHUR McLEAN, OF CEDAR GROVE, WEST VIRGINIA, ASSIGNOR OF ONE-HALF TO JAMES SENTZ BANNISTER, OF CEDAR GROVE, WEST VIRGINIA

FOLDING UMBRELLA

Application filed July 23, 1928. Serial No. 294,734.

This invention relates to improvements in umbrellas, parasols and the like and which embodies among other characteristics means to facilitate folding of the covering therefor.

Another object of the invention comprehends rib sections for the folded portions of the covering.

A further object of the invention contemplates the provision of stays for the rib sections.

An additional object of the invention consists in the provision of slide mountings for the stays.

More specifically stated a portion of the covering is adapted for sliding action upon the umbrella handle.

With the above and other objects in view, the invention further consists in the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claim.

In the drawings:

Figure 1 is a fragmentary vertical sectional view taken through my improved type of umbrella.

Figure 2 is a side elevation of the invention when folded and partly broken away to illustrate the construction thereof.

Figure 3 is a plan view of the supporting structure of my invention when extended for use.

Figure 4 is a sectional view taken on line 4—4 of Figure 1.

Referring to the drawings in detail, wherein like characters of reference denote corresponding parts, the reference characters 10 and 11 indicate handle sections, both of which being bifurcated, as at 12, to accommodate the adjacent ends of a pivoted link 13 by means of which the handle sections may be folded one upon the other.

A sleeve member 14, slidably mounted upon the handle section 11, is also adapted to accommodate the adjacent portion of the handle section 10 when disposed in the position as best illustrated in Figure 1 of the drawings, whereby the handle sections may be joined for use as a unitary handle or staff. A pin 15, laterally projected from the handle section 10, is adapted to prevent downward movement of the sleeve 14 therebeyond.

A runner 16, carried upon the uppermost end of the sleeve member 17, slidably mounted upon the handle section 11, is provided with radially disposed ears upon the periphery thereof between which the adjacent ends of rib members 18 are secured. Rib sections 19, foldably connected, as indicated at 20, upon the outermost ends of the rib members 18, are adapted to provide the frame work or supporting structure for a covering, such as indicated at 21, which may be formed of any suitable material.

From the illustration in Figure 1 of my drawings, the rib members 18 and rib sections 19, when disposed in end to end relation, will curve outwardly and downwardly from the completed umbrella handle when supported in a vertical position.

Stays 22, having connection at their outermost ends with the inner sides of the rib sections 19, adjacent the pivot connections therefor, such as indicated at 20, with the rib members 18, through the instrumentality of hinge connections 24, have their opposite ends pivotally connected with the lowermost end of the sleeve 17 whereby the rib sections 19 will be held against displacement when the umbrella or parasol is opened. A catch 25 projected from the handle section 11 is adapted to engage the lower periphery of the sleeve 17.

Brace rods or stays 26, pivotally connected, as indicated at 27, to a sleeve member 28 fixed upon the handle section 11 above the folding connection between the handle sections 10 and 11, are joined at their outermost ends, as at 29, to the inner sides of the rib members 18 adjacent the pivot connections 20 of the rib sections 19 therewith. By reason of the fact that the sleeve 28 is fixed and that the braces or stays 26 provide the means of connection therebetween and the rib members 18, the latter are sprung downwardly and henceworth shift the sleeve member 17 downwardly upon the vertically disposed handle member 11 to engage the catch 25. Such action will also tend to more rigidly position the rib sections 19 inasmuch as the stays 22

thereby exert outward tension thereto from the sleeve 17.

As illustrated in Figure 3 of my drawings, the stays 22 cross the stays or braces 26 and frictionally engaged same whereby lateral shifting movement of the adjustments attained will be prevented.

After the rib members 18 and the rib sections 19 are folded one upon the other in the manner as illustrated in Figure 2 of the drawings, in conjunction with the sleeve 17, the handle section 10 may then be folded against the outer side of the covering 21.

The particular umbrella may be folded, packed and stored within confined area and may be most conveniently carried in suitcases and other baggage carriers.

The invention is susceptible of various changes in its form, proportions and minor details of construction, and the right is herein reserved to make such changes as properly fall within the scope of the appended claim.

Having thus described the invention, what is claimed is:—

In an umbrella including upper and lower foldably mounted handle sections, a sleeve vertically slidable upon the uppermost of the handle sections, rib members pivotally connected with the upper periphery of the sleeve and extended outwardly therefrom, rib sections foldably connected with the outermost ends of the rib members, stays adapted for establishing connection between the lowermost periphery of the sleeve and the rib sections, and a sleeve fixed upon the uppermost of the handle sections; stays having pivotal connection at their ends with the fixed sleeve and rib members.

In testimony whereof I affix my signature.

ARTHUR McLEAN.