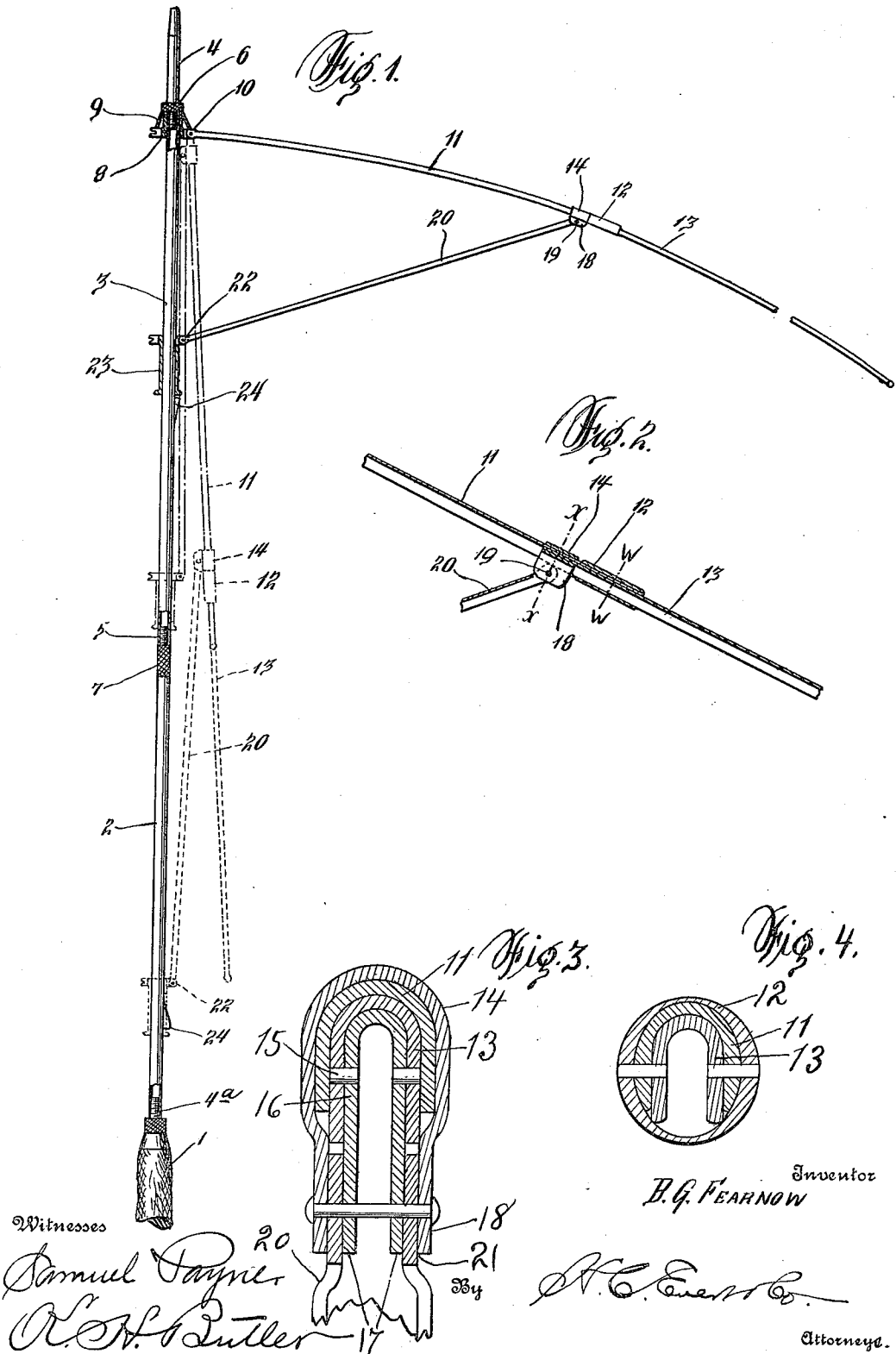


B. G. FEARNOW.
FOLDING UMBRELLA.
APPLICATION FILED AUG. 23, 1909.

962,328.

Patented June 21, 1910.



UNITED STATES PATENT OFFICE.

BRADY G. FEARNOW, OF PITTSBURG, PENNSYLVANIA.

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Specification of Letters Patent. Patented June 21, 1910.

Application filed August 23, 1909. Serial No. 514,193.

To all whom it may concern:

Be it known that I, BRADY G. FEARNOW, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Folding Umbrellas, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to folding umbrellas in which both stick and ribs are adapted to be reduced in length by making the ribs telescopic and the stick in sections.

The object of my invention is to provide an umbrella that can be readily reduced in its longitudinal dimension so that it can be placed in a comparatively small receptacle, such as a hand bag or the pocket of a coat.

Another object of this invention is to afford means for quickly restoring parts of the umbrella to their extended or opened position, and to furnish means for rigidly securing the parts against accidental collapse.

A further object of this invention is to provide a simple and durable mechanism for accomplishing the above results, and to so design and construct the parts as to give the requisite strength and rigidity without unusual increase in the weight and dimension, and to supply movable parts that can be readily assembled or repaired.

With the above and other objects in view, the invention consists in the novel construction, combination and arrangement of parts to be hereinafter described in detail and then claimed.

Reference will now be had to the drawing forming a part of this specification, wherein:—

Figure 1 is an elevation of the stick and one rib and spreader, the remaining ribs and spreaders being omitted, Fig. 2 is a longitudinal sectional view of a portion of one of the ribs, Fig. 3 is an enlarged cross sectional view of a rib taken on the line X—X of Fig. 2, and Fig. 4 is a similar view taken on the line W—W of Fig. 2.

The stick of the umbrella consists of a handle 1, a handle section 2, an intermediate section 3 and a tip section 4. The sections 2 and 3 are tubular, and the ends of the section 3 are interiorly screw threaded, while the lower end of section 2 is similarly threaded. The handle 1 is provided with an exteriorly threaded plug 4^a adapted to screw

into the lower end of the section 2, the upper end of the section 2 is provided with a similar plug 5 adapted to screw in the lower end of the section 3 and the tip section 4 is also provided with a plug 6 adapted to screw in the upper end of the section 3. To facilitate the operation of connecting and disjoining the sections, the sections 2 and 4 and the handle 1 adjacent to their respective plugs are knurled or roughened, as at 7 to permit of a positive grip on said sections.

The upper end of the intermediate section 3 is fitted with the usual notched collar 8 and a cap-plate 9. Pivotally connected to the notched collar 8 by the usual retaining wire 10 are ribs 11. These ribs are channel shaped in cross section and have the outer ends thereof provided with sleeves 12. Slidably mounted in the sleeves 12 are channel shaped extensions 13 adapted to slide in the ribs 11.

Slidably mounted upon the ribs 11 is a shoe 14, and in the upper end of the extension 13 is secured, as at 15 a U-shaped member 16, the lower edges of said member being parallel with the lower edges of the shoe 14, thereby providing two sets of flanges 17 and 18. Pivotally mounted between said flanges by a rivet 19 is the outer end of a channel shaped stretcher 20, the outer end of said stretcher being cut away, as at 21 to allow the sides thereof to extend between the flanges 17 and 18 whereby the rivet 19 can pass through the stretcher. The inner sides of the stretcher 20 are pivotally connected, as at 22 to a runner 23 slidably mounted upon the stick of the umbrella. The runner is retained in raised and lowered positions by the conventional form of spring 24.

The ribs 11 and the extension 13 thereof serve to support the cloth covering in the usual manner and the umbrella is adapted to be folded without injuring the cover.

In Fig. 1 of the drawing the dot and dash line (— · — · —) indicates the position of the stretchers 20 and the extensions 13 of the ribs 11 when the umbrella is folded, while the dotted line (.....) indicates the position of the stretches, ribs and their extensions when the umbrella is lowered.

It is apparent that the umbrella can be folded into a parcel having for its length approximately the length of the intermediate section 3, and the handle section 2, tip

section 4 and handle 1 can be placed in the cover or folds thereof when the umbrella is collapsed.

5 While in the drawing there is illustrated a preferred embodiment of the invention, it must be understood that the structural elements thereof can be varied or changed without departing from the spirit or scope of the invention.

10 Having now described my invention what I claim as new, is:—

15 An umbrella comprising a channel-shaped rib pivotally-connected to a notched collar, a sleeve secured to the free end of said rib and constituting an abutment, a shoe slidably mounted upon the rib and having depending flanges, said sleeve limiting the outward movement of said shoe, an extension projecting into said rib, a U-shaped

member secured to that end of the extension 20 within the rib and provided with flanges extending in parallelism with respect to the flanges of the shoe, said member secured to the inner face of said extension, a stretcher having its outer end extending between the 25 flanges of said member and the flanges of said shoe, means extending to the outer end of the stretcher and the flanges of said member and shoe for pivotally-connecting the stretcher to the shoe and extension, and a 30 runner to which the inner end of said stretcher is pivoted.

In testimony whereof I affix my signature in the presence of two witnesses.

BRADY G. FEARNOW.

Witnesses:

JACOB ROTH,
KARL H. BUTLER.