

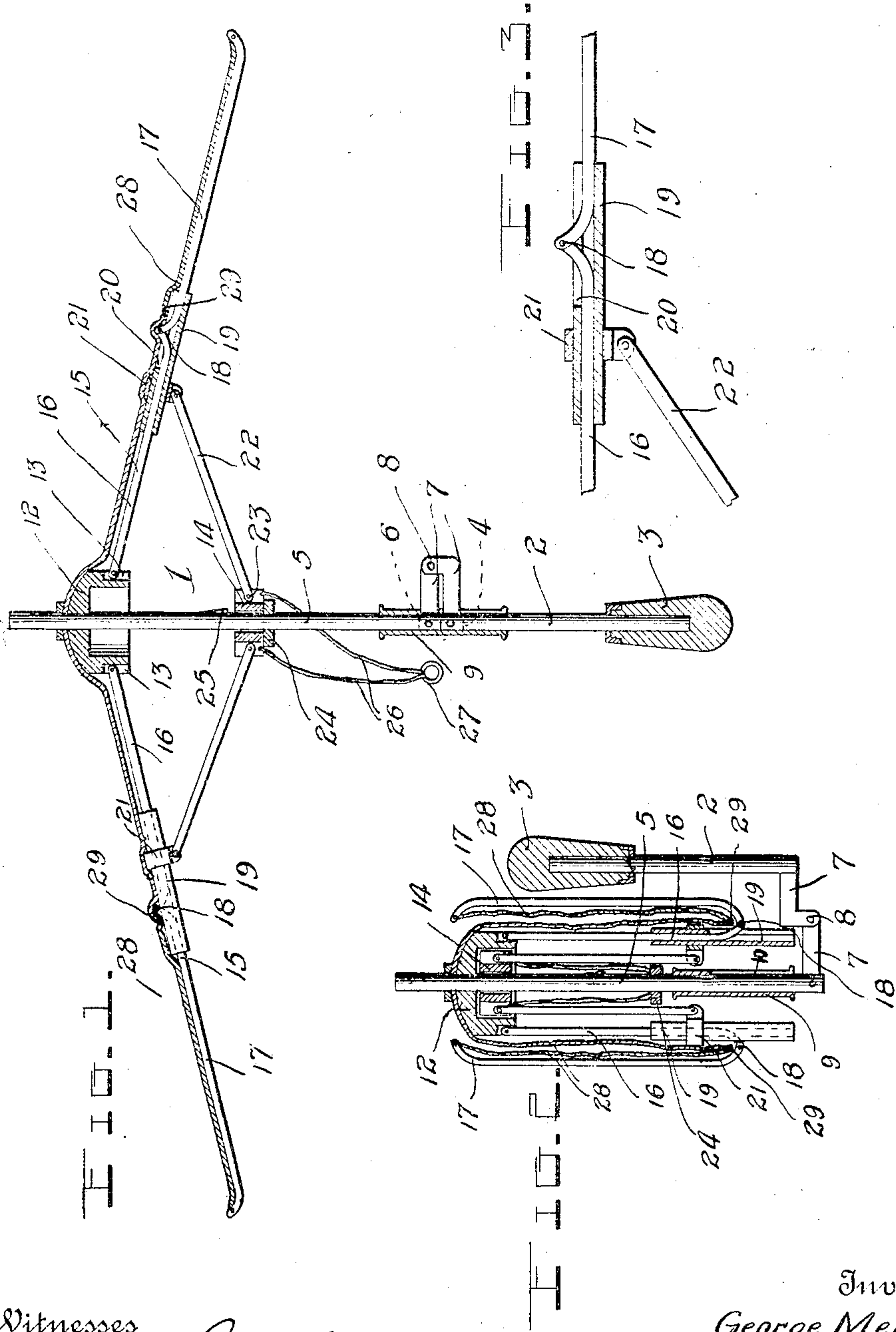
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G. MEYER.

FOLDING UMBRELLA.

APPLICATION FILED JULY 8, 1907.



Witnesses

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GEORGE MEYER, OF ST. LOUIS, MICHIGAN.

FOLDING UMBRELLA.

No. 875,547.

Specification of Letters Patent.

Patented Dec. 31, 1907.

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To all whom it may concern:

Be it known that I, GEORGE MEYER, a citizen of the United States, residing at St. Louis, in the county of Gratiot and State of Michigan, have invented certain new and useful Improvements in Folding Umbrellas; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in umbrellas.

The object of the invention is to provide an umbrella adapted to be folded into a small, compact form whereby the same may be readily strapped onto a valise, or placed in a trunk.

With this object in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a vertical sectional view of an umbrella constructed in accordance with the invention, showing the same in open extended position, with the cover hinged thereon; Fig. 2 is a similar view, showing the parts folded and Fig. 3 is an enlarged detail sectional view through the jointed portion of one of the ribs.

Referring more particularly to the drawings, 1 denotes the umbrella rod, which is formed in two sections, the inner section, 2, having secured to one end a handle, 3, while in the outer end is formed a slot, 4. The outer section has formed in its inner end a corresponding slot, 6. Rigidly secured in the slots 4 and 6 are laterally projecting right-angulary disposed connecting bars, 7, the outer ends of which are pivotally connected together as shown at 8.

Slidably mounted on the outer section 5 of the rod is a locking sleeve 9, in the outer portion of one side of which is formed a vertically disposed slot, 10. The sleeve 9 is adapted to be slipped outwardly on the section 5 and into engagement with the end of the section 2, when said sections are in alignment as shown in Fig. 1 of the drawings. The slot 10 in the sleeve 9 engages the laterally projecting connecting bars 7 and permits the rod to be slipped by the same and

into engagement with the inner section 2 of the rod.

Secured to the outer section 5 of the rod adjacent to its outer end is a fixed outer crown, 12, which is provided with the usual series of radially disposed notches 13 in which are pivotally secured the inner ends of the ribs. The crown 12 is provided on its inner end with an annular recess which is adapted to receive the runner 14 when the umbrella is in a closed position.

Pivotally mounted at their inner ends in the notches 13 of the crown 12, are ribs 15, said ribs consisting of inner and outer sections 16 and 17. The inner ends of the section 17 and the outer end of section 16 of the ribs are curved outwardly and are pivotally connected together as shown at 18. To the outer end of the section 16 of the ribs is secured a stop sleeve 19, the end of which projects beyond the end of the section 16 and is provided in one side with a longitudinally disposed slot 20, through which the curved ends 18 of the sections 16 and 17 project, and by means of which the outer section 17 may be turned outwardly into alignment with the inner section when the umbrella is in an open position. The section 17 is supported in an operative position by means of its engagement with the outer side of the sleeve 19. The outer ends of the section 17 of the ribs are curved outwardly to prevent the same from catching in the cover of the umbrella when the latter is in a closed position.

Around the sleeves 19 adjacent to their inner ends are secured collars 21, to which are pivotally connected the outer ends of rib braces 22, the inner ends of which are pivotally connected to a slidably mounted runner 23, arranged on the outer section of the rod, as shown. The runner 23 is adapted to engage a stop collar 24 on the outer section of the rod when the umbrella is in an open position, said runner being held in engagement with the stop collar 24 by means of a spring catch 25, which is arranged in a slot formed in one side of the outer section of the rod, immediately above the collar 24. The catch 25 is adapted to be pushed inwardly into the slot when it is desired to close the umbrella, thus permitting the runner 23 to be slipped outwardly over said catch and into the recess formed in the inner end of the crown, 12, as hereinbefore described.

Connected to the runner 23 are cords 26, to the outer ends of which is secured a bead or button, 27. The cords 26 are provided to draw the runner 23 out of the recess in the crown 12 and into engagement with the stop collar 24 to open the umbrella.

Arranged on the ribs 15 is a cover 28, which may be formed of any suitable material, and which is secured at its opposite edges to the crown 12 and to the outer ends of the ribs, as shown. The cover 28 is preferably provided with a seam 29 arranged therein opposite to the pivotal connection between the inner and outer sections of the ribs, thereby facilitating the folding of the cover when the umbrella is closed and folded.

The sections 16 and 17 of the ribs are provided with outwardly curved pivotally connected ends, whereby when said sections of the ribs are folded upon each other, a space is formed between said sections to provide for the disposition of the cover 28. The connected ends of the sections 2 and 5 of the rod are provided with the connecting bars 7 so that when the inner section of the rod is folded, said section will be spaced from the outer section 5 a sufficient distance to permit said inner section 2 to readily fold over the folded ribs and cover portion of the umbrella, as is clearly illustrated in Fig. 2 of the drawing.

From the foregoing description, taken in connection with the accompanying drawing, the construction and operation of the invention may be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention as defined in the appended claims.

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

1. In a folding umbrella, a rod formed in sections, means to hingedly connect the inner ends of said sections together, a rib crown secured to the outer end of said rod, said crown having formed therein an annular recess, a runner slidably mounted on said rod and adapted to be engaged with the recess in said crown when the umbrella is in a folded position, ribs pivotally secured at their outer ends to said crown, said ribs consisting of inner and outer sections having outwardly curved pivotally connected ends, a supporting sleeve on the outer end of said inner sections of the ribs, said sleeve having formed therein slots to receive the inner ends of the outer sections of the ribs when the latter are in an open position, braces connected to said sleeve and to said runner, a stop collar on said rod adapted to be engaged by said runner when the umbrella is in an open position, a spring catch adapted to hold said runner in place, and a flexible connection secured to said runner whereby the same may be drawn outwardly, substantially as described.

2. In a folding umbrella, a folding rod comprising an inner section, 2, and an outer section, laterally disposed connecting bars secured to each section and pivoted to each other at their outer ends, a sleeve slidable on one of said sections and a slot in said sleeve to receive said laterally disposed connecting bars.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE MEYER.

Witnesses:

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E. C. SINEIPE.