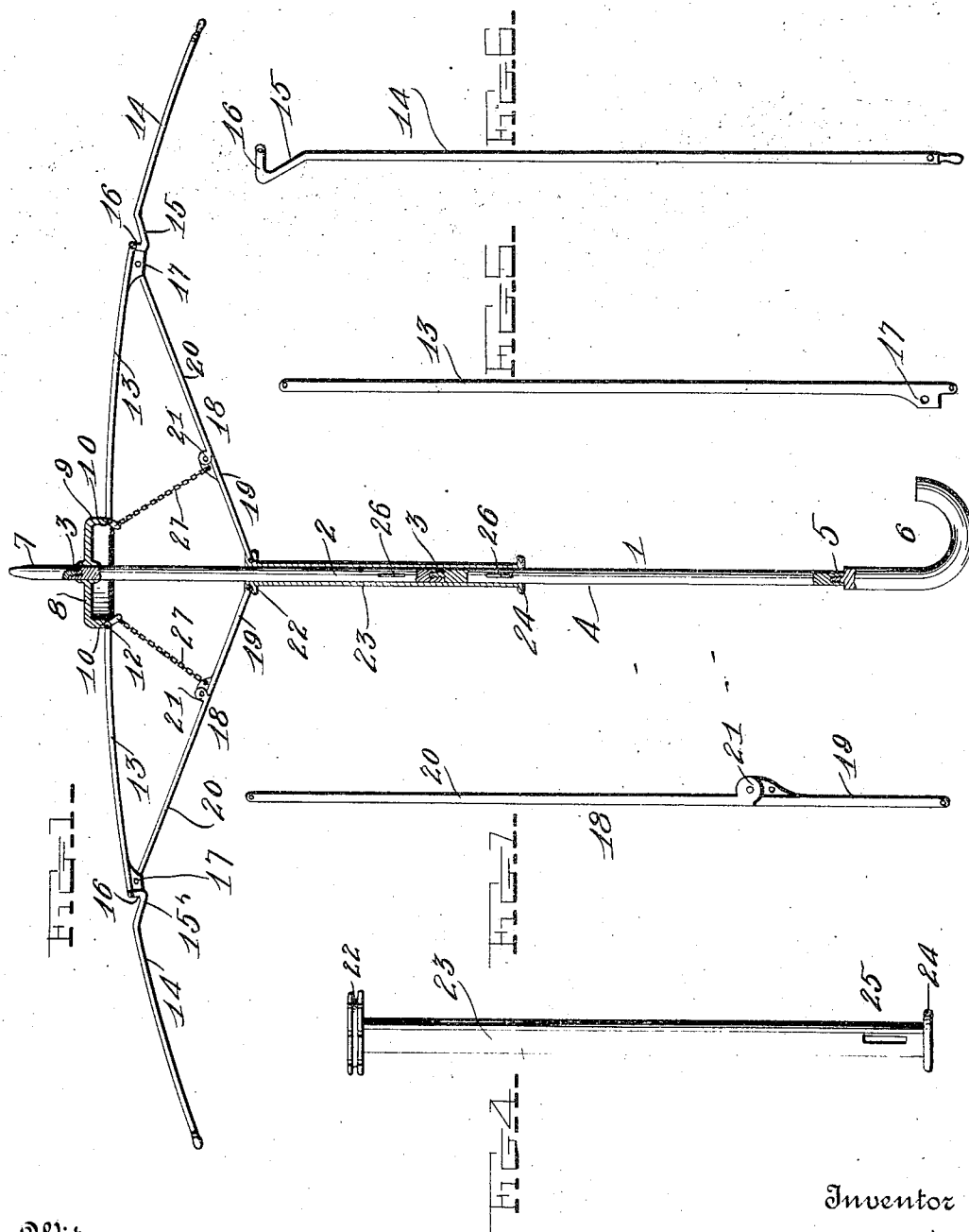


J. H. ALLEN.
FOLDING UMBRELLA.
APPLICATION FILED MAR. 21, 1912.

1,058,213.

Patented Apr. 8, 1913.

2 SHEETS—SHEET 1.



Witnesses
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O. B. Hoffman

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J. H. Allen.

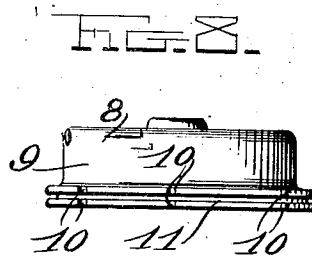
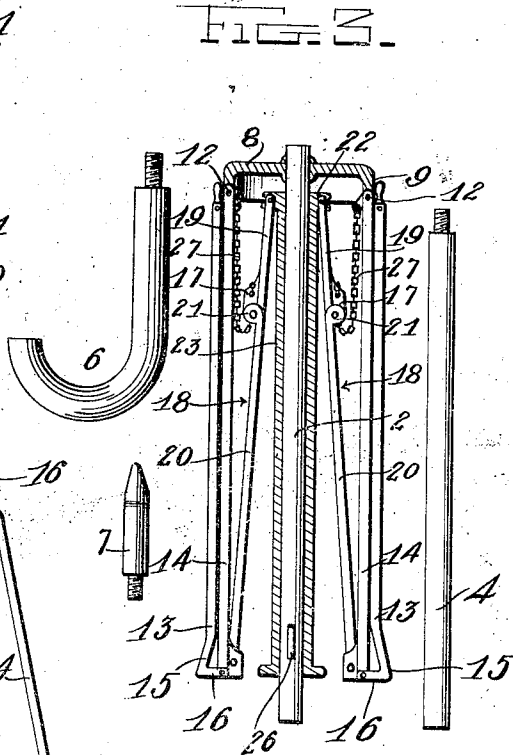
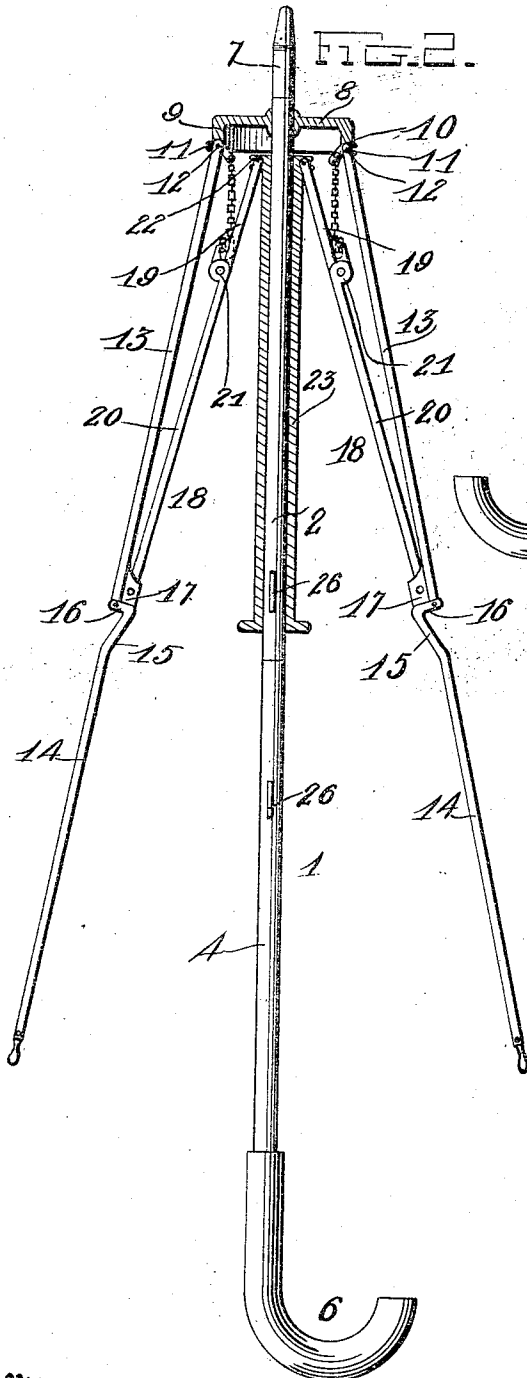
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2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

JAMES H. ALLEN, OF APALACHICOLA, FLORIDA, ASSIGNOR OF ONE-HALF TO A. A. CORE, OF APALACHICOLA, FLORIDA.

FOLDING UMBRELLA.

1,058,213.

Specification of Letters Patent.

Patented Apr. 8, 1913.

Application filed March 21, 1912. Serial No. 685,270.

To all whom it may concern:

Be it known that I, JAMES H. ALLEN, a citizen of the United States, residing at Apalachicola, in the county of Franklin and State of Florida, 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 folding umbrellas.

One object of the invention is to provide a folding umbrella having an improved construction of jointed ribs and braces adapted to be folded into compact form, and having a handle formed in separable sections, which when separated and the parts folded reduces the umbrella to such size as to permit the same to be carried in the pocket or in a hand bag.

With this and other objects 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 central vertical sectional view of my improved umbrella showing the ribs and braces in open position; Fig. 2 is a similar view showing the ribs and braces in extended and partly open position; Fig. 3 is a similar view showing the parts in folded position and the parts of the rod and handle disconnected; Fig. 4 is a detail side view of the runner; Figs. 5 and 6 are similar views of the inner and outer sections of one of the ribs; Fig. 7 is a similar view of one of the braces; Fig. 8 is a similar view of the crown piece of the frame to which the inner ends of the ribs are attached.

Referring more particularly to the drawings 1 denotes the rod of my improved umbrella said rod comprising an inner section 2 having in its ends threaded sockets 3 into one end of which is screwed an outer handle receiving section 4 the inner end of which is reduced and threaded and in the outer end of which is formed a threaded socket 5 into which is screwed the reduced inner end of the handle 6. In the socket 3 in the opposite end of the section 4 from the handle end is

screwed the reduced and threaded inner end 55 of the tip 7 of the rod.

Secured in any suitable manner to the section 2 of the rod is a crown piece 8, having an inwardly projecting flange 9 provided with a series of notches 10 with which the ribs of the umbrella are engaged and an annular groove 11 to receive the fastening wire 12 of the ribs. The ribs are formed in inner and outer folding sections 13 and 14 hingedly connected together at their adjoining ends. The hinged ends of the outer sections 14 of the ribs are bent laterally or offset as shown at 15 and provided with right angular apertured lugs 16 with which are engaged and pivotally connected the adjacent apertured ends of the inner sections 13. On the inner sides of the sections 13 adjacent to the hinged connection of the outer sections are formed apertured lugs 17 with which are connected the outer ends of the braces 18. The flattened and perforated inner ends of the sections 13 of the ribs are engaged with the notches in the flange 9 of the crown piece 8 and are secured therein by the fastening wire 12.

The braces 18 are formed in inner and outer sections 19 and 20 which are hingedly connected together by rule joint connections 21. The outer ends of the sections 20 are pivotally connected to the lugs 17 while the inner ends of the sections 19 are pivotally connected to the notched flange 22 of the runner 23 in the usual manner. The outer end of the runner is provided with a bead 24 and in the side of the same near said end is formed a slot 25 which is adapted to engage the usual form of spring catches 26 for holding the umbrella in closed and open position. Connected to the inner sections 19 of the braces adjacent to the joints 20 are brace supporting chains 27 the upper ends of which are secured to the flange 9 of the crown piece 8.

To open the umbrella the outer sections of the ribs and the outer portion of the cover are swung outwardly as shown in Figs. 1 and 2 after which the runner and inner end of the rib is moved outwardly on the rod until the chains 27 become tight. A further outward movement of the runner will then swing the braces on the chains thereby causing the outer ends of the braces to force the ribs outwardly to a full expanded posi-

tion thus opening the umbrella. In closing the umbrella the outer sections of the ribs and the cover are folded back onto the inner portions and the runner pushed inwardly thereby swinging the braces inwardly and thus drawing the folded ribs inwardly to a closed position. The handle is then detached from the rod and the sections of the latter separated. In packing the sections of the handle they may if desired be placed in the folded umbrella.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will 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 described my invention what I claim is:—

1. A folding umbrella comprising a rod, a runner slidably mounted on said rod, a crown piece fixed to the rod, ribs hingedly connected to said crown piece, said ribs comprising inner and outer hingedly connected

sections, braces hingedly connected at their outer ends to said ribs and at their inner ends to said runner, said braces being formed in hingedly connected sections and chains to connect the inner sections of the braces to said crown piece.

2. A folding umbrella comprising a rod, a runner slidably mounted on said rod, a crown piece fixed to the rod, ribs hingedly connected to said crown piece, said ribs comprising inner and outer hingedly connected sections, said inner sections having formed thereon near their outer ends apertured lugs and said outer sections having curved or offset inner ends, braces hingedly connected at one end to said runner and at their opposite ends to the apertured lugs on said ribs, said braces comprising short inner sections and long outer sections said sections having joint connections and chains to connect the inner ends of the inner sections to said crown piece.

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

JAMES H. ALLEN.

Witnesses:

R. DON McLEOD, Jr.,
ANNIE McLEOD.