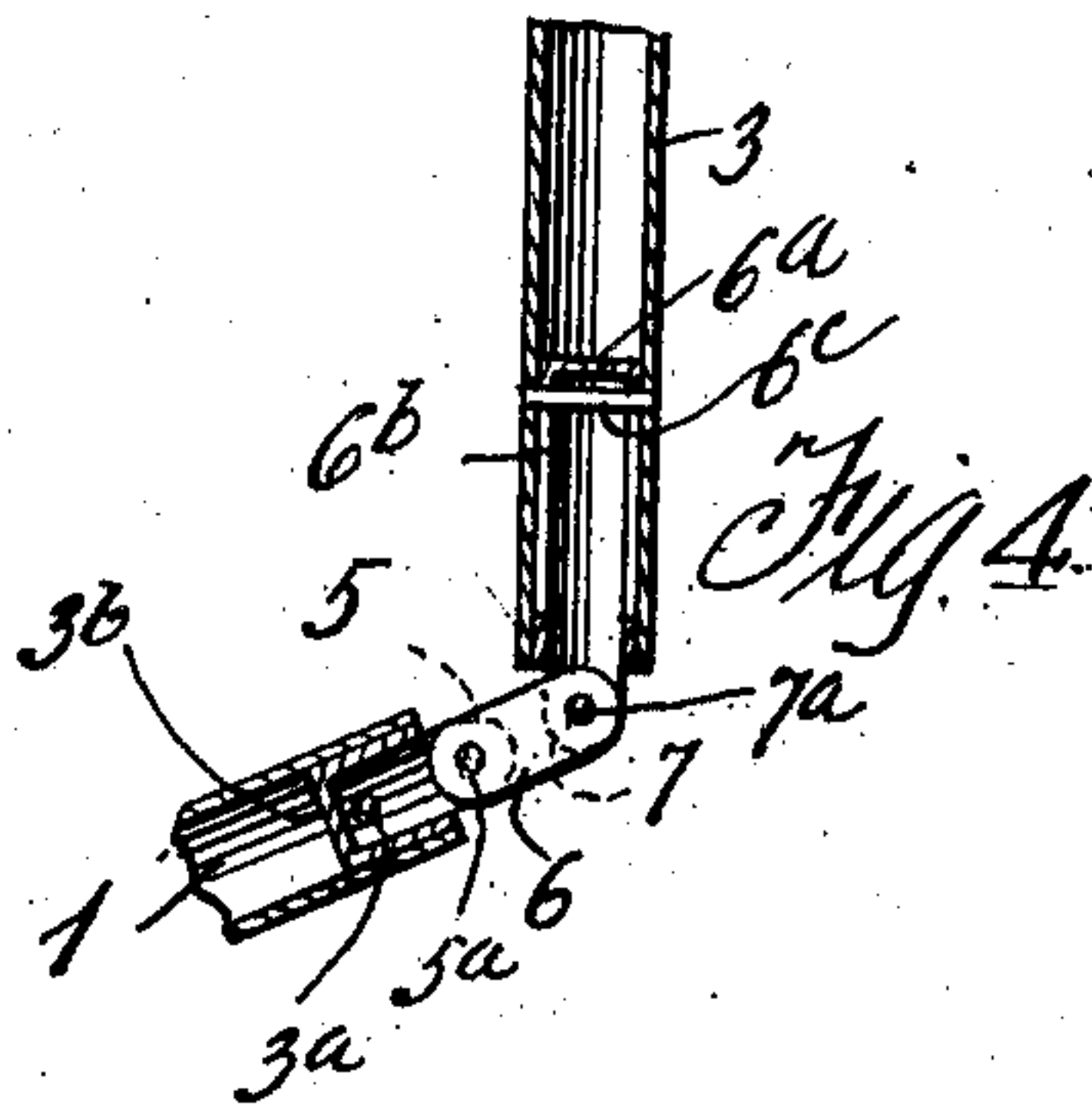
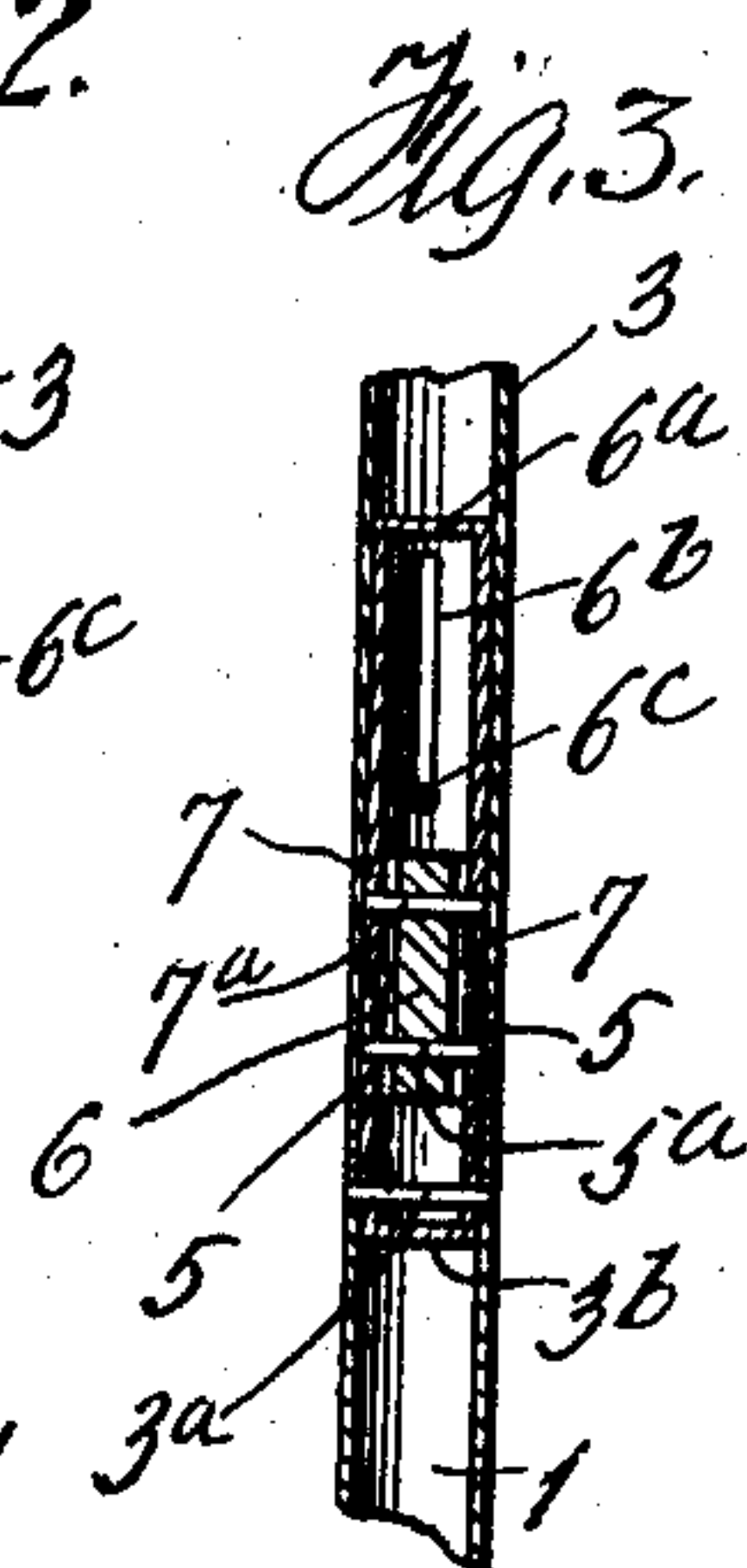
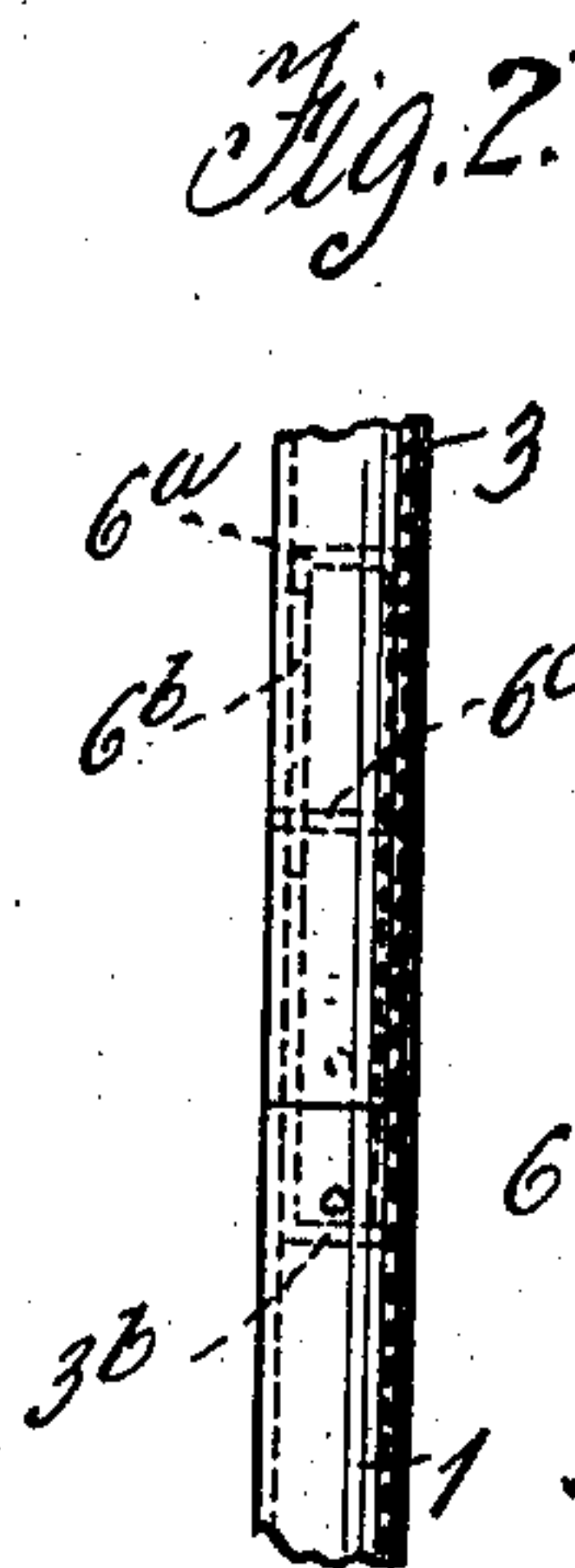
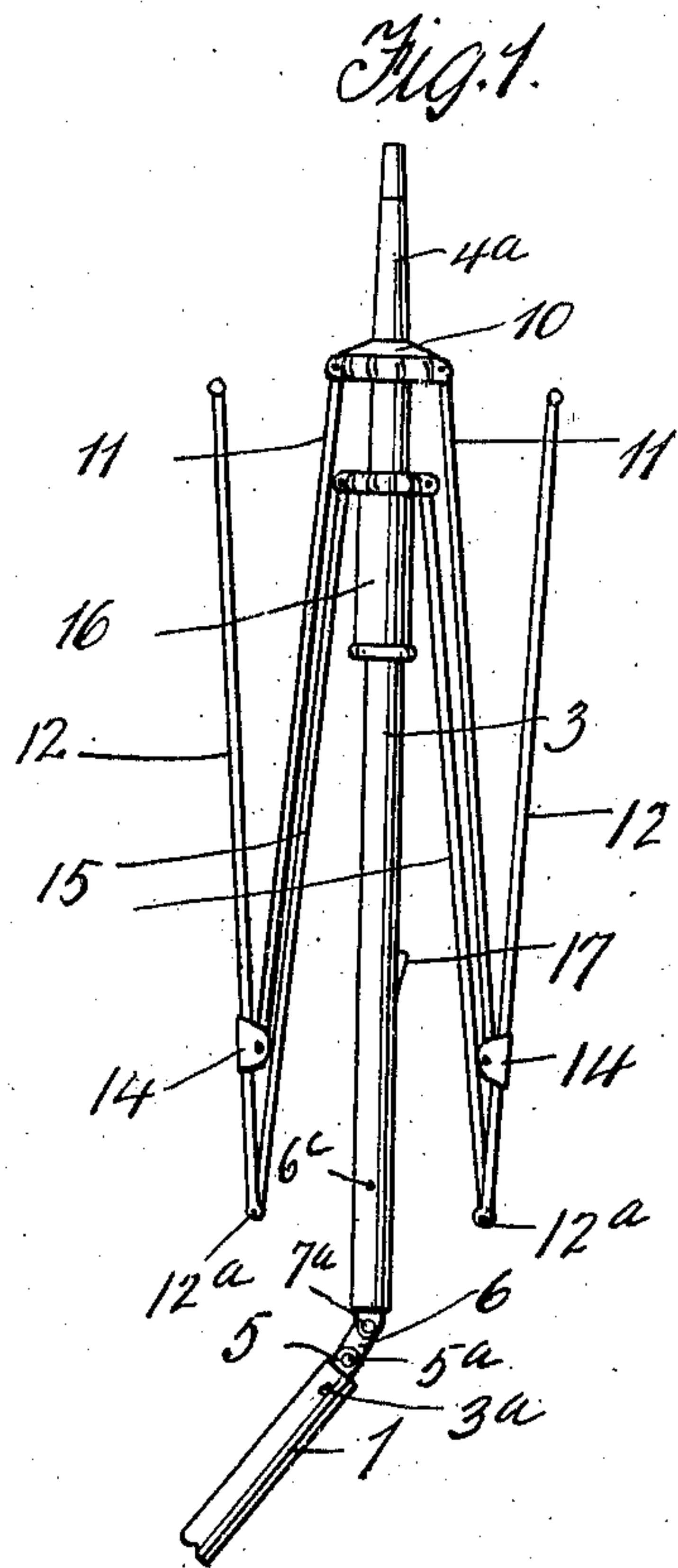


E. H. NEWMAYER.
FOLDING UMBRELLA.
APPLICATION FILED NOV. 18, 1909.

963,634.

Patented July 5, 1910.



Witnesses:

Samuel Payne
K. H. Butler

Inventor
E. H. Newmeyer
by *H. C. Ewert & Co.*
Attorneys.

UNITED STATES PATENT OFFICE.

EDWARD H. NEWMAYER, OF HOMESTEAD, PENNSYLVANIA.

FOLDING UMBRELLA.

963,634.

Specification of Letters Patent.

Patented July 5, 1910.

Application filed November 18, 1909. Serial No. 528,779.

To all whom it may concern:

Be it known that I, EDWARD H. NEWMAYER, a citizen of the United States of America, residing at Homestead, 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 umbrellas, and more particularly to that class in which both stick and ribs are adapted to be reduced in length by folding, and commonly known as a folding umbrella.

The paramount objects of my invention are 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 the coat; to afford means for quickly restoring the parts to their extended or open position, and to furnish means for rigidly securing parts of the umbrella against accidental collapse when so extended.

Other objects of my invention are to provide a simple mechanism for accomplishing the desired results; 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 having the desirable quality or durability and so related as to be readily assembled and repaired.

Further objects of my invention are to provide an umbrella that is inexpensive to manufacture and the operation of folding easily performed, and to provide a folding umbrella wherein the parts can be folded without injuring the cover of the umbrella.

These and such other objects as may hereinafter appear are attained by a mechanical construction that will be hereinafter specifically described and then claimed.

Reference will now be had to the drawing forming a part of this specification wherein there is illustrated what I believe to be a practical embodiment of my invention, nevertheless, I desire it to be understood that the structural elements thereof can be varied or changed, as to the size and manner of assemblage, without departing from the spirit and scope of the invention.

In the drawings:—Figure 1 is a side elevation of a portion of the stick and two ribs

of the umbrella partly folded, the remaining ribs being removed for the sake of clearness. Fig. 2 is a side elevation of a portion of the stick. Fig. 3 is a longitudinal sectional view of a portion of the stick shown in Fig. 2, illustrating the sections of the stick in a rigid position. Fig. 4 is a similar view, showing the sections of the stick partially folded.

Referring in detail to the drawing, it will be observed that the stick of the umbrella comprises a tubular handle section 1 having a handle 2 and a tubular tip section 3 having a tip 4^a.

Extending in the inner end of the handle section 1 is a tubular member 3^b fixedly secured in position through the medium of a transversely-extending pin 3^a which projects through the member 3^b and is secured to the handle section 1. The tubular member 3^b is flush with the inner edge of the handle section 1 and is provided with a pair of oppositely-disposed and outwardly extending apertured lugs 5. Mounted in the lugs 5 is a transversely-extending pin 5^a and pivoted upon the said pin 5^a is one end of a link 6. That end of the tip section 3 which opposes the inner end of the handle section 1 has slidably-mounted therein a tubular member 6^a provided with oppositely-disposed longitudinally-extending slots 6^b. Fixed to the tip section 3 and projecting through the slot 6^b is a transversely-extending pin 6^c, the function of which being to limit the inward and outward movement of the member 6^a and the tip section 3. The outer end of the member 6^a is formed with a pair of oppositely-disposed and outwardly-extending apertured lugs 7 to which is fixed a transversely-extending pin 7^a having pivoted thereon the other end of the link 6. The inward movement of the member 6^a is of such extent that when shifted in such direction the inner end of the handle section 1 can abut against the tip section 3 whereby the link 6 will be wholly housed within the tip section 3. When the link 6 is shifted within the tip section 3, a rigid connection will be maintained between the sections 1 and 3, and when the link 6 is withdrawn from the section 3, the section 1 can be folded relative to the section 3.

The upper end of the section 3 adjacent to the tip 4 is provided with a conventional notch 10 pivotally supporting the ribs of the umbrella. The ribs are made in two sec-

tions, an inner section designated 11 and an outer section designated 12, these sections being adapted to support the cover of the umbrella, which for clearness of illustration is not shown.

The lower or outer ends of the inner section 11 are provided with stirrups 14 and the outer sections 12 are slidably mounted in said stirrups. Pivotally connected to the upper or inner ends of the outer rib sections 12 by wrist-pins 12^a are stretchers 15 having the lower ends thereof pivotally connected to a runner 16 of a conventional form. For holding the runner in a fixed position relative to either the section 1 or 3, said sections are provided with the ordinary and well-known type of latch 17.

The manner of connecting the outer rib sections to the inner rib sections permits of the ribs and stretchers being folded in the manner shown in Fig. 1, whereby the stick can be folded and the dimension of the umbrella reduced approximately one-half.

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

In a folding umbrella, a stick comprising a handle section and a tip section, a tubular

element fixed in the handle section and provided with a pair of outwardly-extending oppositely-disposed lugs projecting from the inner end of the handle section, a longitudinally slotted tubular member slidably-mounted in that end of the tip section which opposes the inner end of the handle section and provided with a pair of outwardly-extending oppositely-disposed apertured lugs, a transversely-extending pin carried by the tip section and projecting through the slots of the tubular member for limiting the inward and outward movement of the latter within said section, a pin fixed to each pair of lugs, and a link having its ends pivotally-mounted upon said pins and in connection with the pins constituting means for pivotally-connecting the handle section to the tip section and further maintaining a rigid connection between the two sections when the link is shifted within the tip section.

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

EDWARD H. NEWMEYER.

Witnesses:

MARY M. HEDDEN,
KARL H. BUTLER.