

No. 808,863.

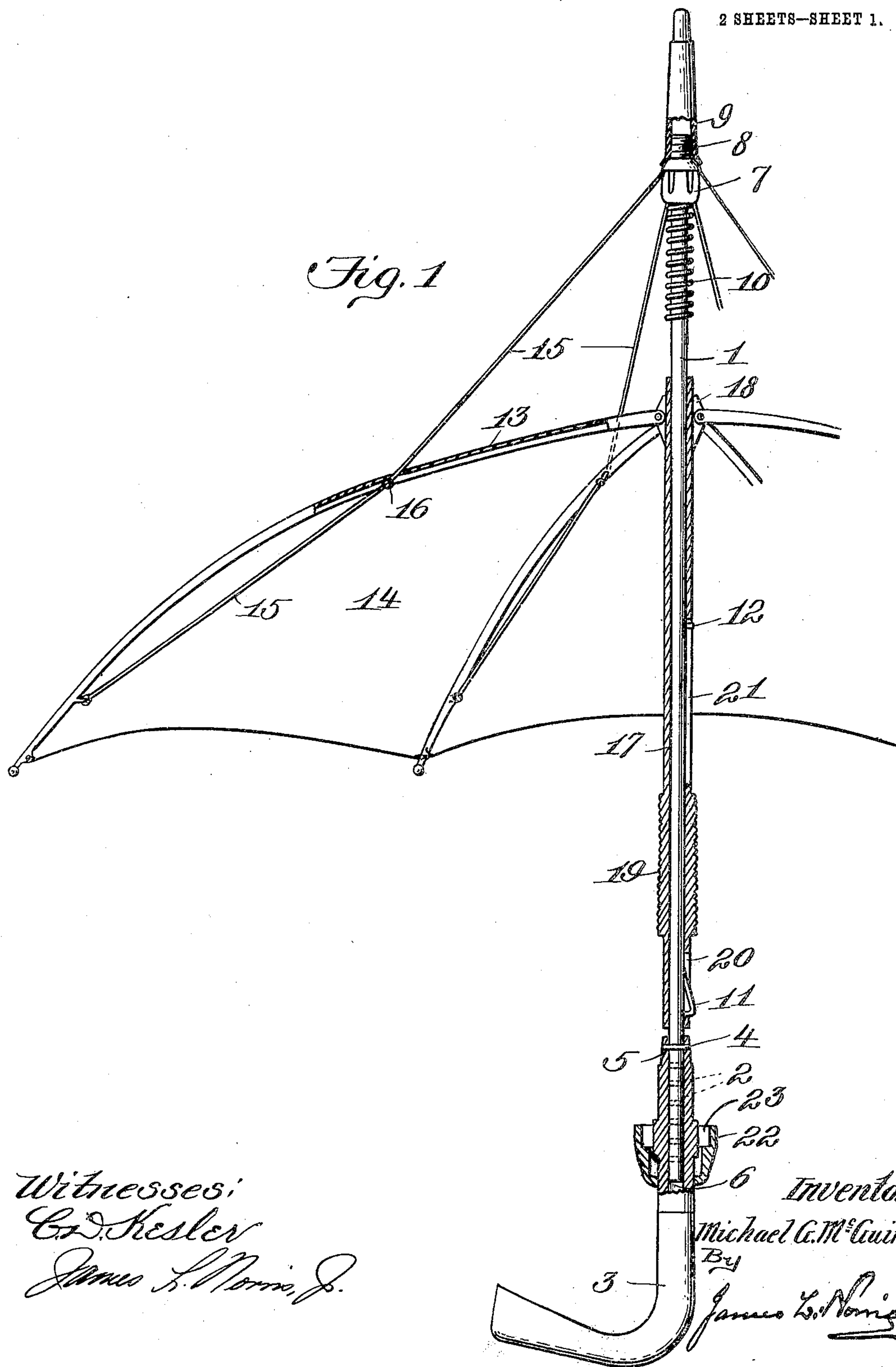
PATENTED JAN. 2, 1906.

M. G. McGUIRE.

UMBRELLA.

APPLICATION FILED MAR. 11, 1905.

2 SHEETS—SHEET 1.



Witnesses:
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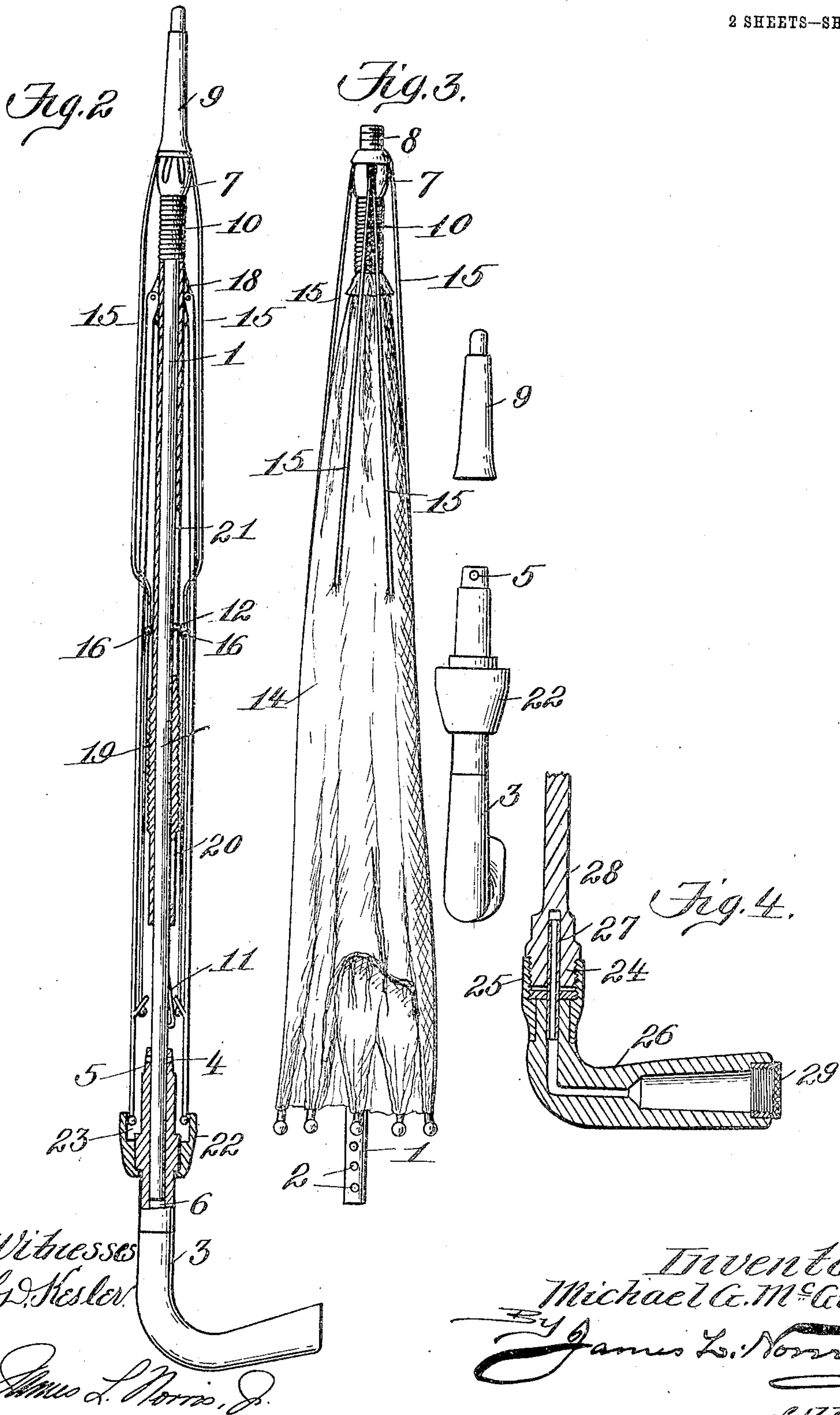
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UNITED STATES PATENT OFFICE.

MICHAEL G. McGUIRE, OF CHICAGO, ILLINOIS.

UMBRELLA.

No. 808,863.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed March 11, 1905. Serial No. 249,647.

To all whom it may concern:

Be it known that I, MICHAEL G. McGUIRE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Umbrellas, of which the following is a specification.

This invention relates to improvements in umbrellas; and the object thereof is to provide an umbrella with new and novel means hereinafter more specifically referred to for readily raising or extending as well as lowering the umbrella, and to further construct an umbrella in such manner which will enable it to be folded in a more compact form, so as to occupy less space, and, furthermore, to construct the umbrella with a detachable ferrule as well as handle, so that the umbrella when not in use can be very readily packed in a case, trunk, or satchel, and to furthermore so connect the handle with the shaft of the umbrella as to enable the increasing or decreasing of the length of the umbrella as is desired.

The invention further aims to construct an umbrella which shall be simple in its construction, strong, durable, efficient in its use, and comparatively inexpensive to manufacture.

With the foregoing and other objects in view the invention consists of the novel construction, arrangement, and combination of parts hereinafter more specifically described, and illustrated in the accompanying drawings, which form a part of this specification, and wherein is shown the preferred embodiment of the invention; but it is to be understood that changes, variations, and modifications can be made which come within the scope of the claims hereunto appended.

In the drawings, wherein like reference characters denote corresponding parts throughout the several views, Figure 1 is a side elevation of the umbrella when extended. Fig. 2 is a like view when closed. Fig. 3 is a view showing the umbrella collapsed for packing with the ferrule and handle removed, and Fig. 4 is a sectional view of a modified form of handle and stick.

Referring to the drawings by reference characters, 1 denotes the stick of the umbrella, having its lower end provided with a plurality of openings 2, and the said lower end of the stick is adapted to extend in the handle 3 as well as be secured thereto through the medium of the removable coup-

ling-pin 4, which extends through openings 5 in the handle and one of the openings 2 in the stick. The handle 3 is formed with an elongated recess 6, into which extends the apertured end of the stick, and the length of the recess 6 is such that it will permit of the end of the stick 1 being adjusted therein, so as to decrease or increase the length of the umbrella. The other end of the stick 1 has fixedly secured thereto a support 7, the function of which will be hereinafter referred to, and the said support 7 has connected therewith a screw-threaded sleeve 8 for the purpose of securing the removable ferrule 9 to the stick 1. The support 7 has connected to the opposite side thereof a coiled compression-spring 10, which surrounds the stick 1, and the function of said spring 10 will be hereinafter referred to. The stick 1 is furthermore provided near its inner end with a spring-latch 11 and at a point removed from said latch with a stop-lug 12. The function of the latch and lug will be hereinafter referred to.

The reference character 13 denotes the ribs of the umbrella, 14 the cover, and 15 the braces of wire, cord, or other flexible material, the upper ends of which are secured to the support 7. Said braces pass downward through apertures provided in the ribs 13, and the lower ends of said braces are secured to the ribs 13 at a point near the lower end of the latter. The braces 15 are provided with knots or knobs 16 arranged just below the aperture in the ribs 13, said knots or knobs being adapted to bear upon said ribs and prevent the latter from slipping downward upon the braces when the umbrella is raised, thus affording a fulcrum for said ribs to turn on when the umbrella is opened and extended. At the same time as the umbrella spreads the portion of said braces between the said knots 16 and their point of attachment near the lower ends of the ribs 13 afford an inner brace for such ribs, thereby preventing the umbrella from being turned inside out by sudden gusts of wind. Slidably mounted upon the stick 1 is an elongated sleeve 17, carrying on its upper end a series of notches 18, in which the ribs 13 are pivotally connected. Near the lower end of the sleeve 17 is a gripping portion 19, which is adapted to be grasped by the operator when extending or spreading the umbrella. The lower end of the sleeve 17 is provided with an elongated slot 20, into which is adapted to extend the

latch 11 for retaining the umbrella in an extended position. The sleeve 17 above the gripping portion 19 is furthermore provided with an elongated slot 21, into which extends
 5 the lug 12, and said lug 12 is adapted to engage the upper or lower end of the slot 21, thereby limiting the movement of the sleeve 17 when the latter is adjusted. The spring 10
 10 acts as an abutment for the sleeve 17 when the umbrella is closed, and, furthermore, also acts as a means for partly opening or extending the umbrella before the operator adjusts the sleeve 17. This is evident owing to
 15 the fact that when the umbrella is closed the spring 10 is compressed and when the ribs are released the expansion of the spring 10 will cause the movement heretofore set forth.

When the umbrella is closed, the ribs are retained around the handle through the medium of a band 22 of such diameter with respect to the handle as to form a recess 23 to receive the lower ends of the ribs. The band 22 is adjustable upon the handle.

When it is desired to open the umbrella,
 25 the band 22 is adjusted so as to release the ends of the ribs, and the ribs will immediately fly outwardly, owing to the action of the spring 10. The operator then grasps the sleeve 17 and pulls the same toward the handle until the latch 11 engages in the slot 20,
 30 and by such action the umbrella will be extended and retained in such position until the latch 11 is depressed, so that the sleeve can be moved in an opposite direction, which will
 35 cause the collapsing of the umbrella.

In Fig. 4 a modified form of handle is shown, and in this construction the shaft is hollow at one end, and, furthermore, is provided with a screw-threaded enlargement, as
 40 at 24, and said enlargement is secured within a screw-threaded band 25, carried by the handle 26. The handle 26 is furthermore provided with a hollow stem 27, which is adapted to extend into the hollow portion of the
 45 shaft 28. The other end of the handle is formed with a closure-cap 29, which is removable. The handle is hollow, so that when it is removed from the shaft of the umbrella and the cap 29 also removed the handle will
 50 act as a pipe-bowl. The mouthpiece of the pipe is secured upon the hollow stem 27.

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

55 1. An umbrella comprising a stick, a support fixed to one end thereof, a slidable sleeve mounted upon said stick, ribs connected to one end of said sleeve, flexible braces connected to the ribs and to the said support,
 60 said ribs adapted to be spread when the sleeve is moved toward the handle end of the stick, and a spring mounted upon said stick and interposed between said support and

that end of the sleeve to which the ribs are connected. 65

2. An umbrella comprising a stick, a support fixed to one end thereof, a slidable sleeve mounted upon said stick, ribs connected to one end of said sleeve, flexible braces connected to the ribs and to the said support,
 70 said ribs adapted to be spread when the sleeve is moved toward the handle end of the stick, a spring mounted upon said stick and interposed between said support and that end of the sleeve to which the ribs are connected,
 75 and a latch carried by the stick near the handle end thereof and adapted to project through the sleeve for retaining the umbrella in an extended position.

3. An umbrella comprising a stick, a support fixed to one end thereof, a slidable sleeve mounted upon the stick and when moved toward the other end thereof adapted to open the umbrella, ribs connected to one end of said sleeve, flexible braces having one end
 85 connected to the ribs at a point intermediate the ends thereof and the other end connected to said support, and a spring interposed between said support and that end of the sleeve to which the ribs are connected. 90

4. An umbrella comprising a stick, a support fixed to one end thereof, a slidable sleeve mounted upon the stick and when moved toward the other end thereof adapted to open the umbrella, ribs connected to one end of
 95 said sleeve, flexible braces having one end connected to the ribs at a point intermediate the ends thereof and the other end connected to said support, a spring interposed between said support and that end of the sleeve to which the ribs are connected, and a latch carried by the stick and adapted to project through the sleeve for retaining the umbrella in an extended position. 100

5. An umbrella comprising a stick provided at one end with a ferrule and at its other end with a handle, an elongated sleeve mounted upon said stick and movable toward the handle end of the stick for opening the umbrella, a latch carried by the stick
 110 near the handle end thereof and adapted to project through the sleeve for retaining the umbrella in an extended position, a support fixed to said stick in close proximity to the ferrule, ribs pivotally connected to one end of the sleeve, and braces having one end connected to said support and the other end secured to the ribs at a point intermediate the ends thereof. 115

In testimony whereof I have hereunto set
 my hand in presence of two subscribing witnesses. 120

MICHAEL G. McGUIRE.

Witnesses:

F. O. PARKER,
 JAMES L. NORRIS, Jr.