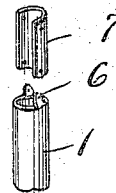
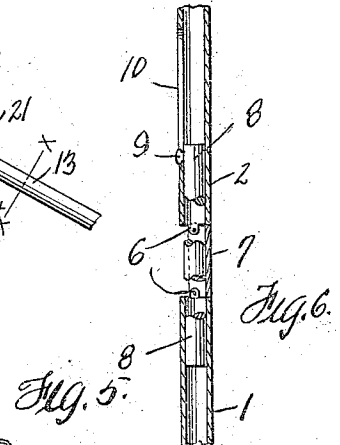
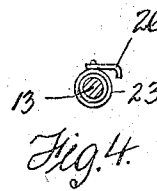
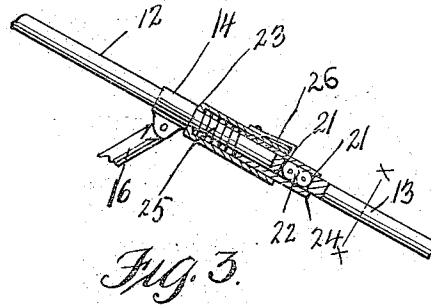
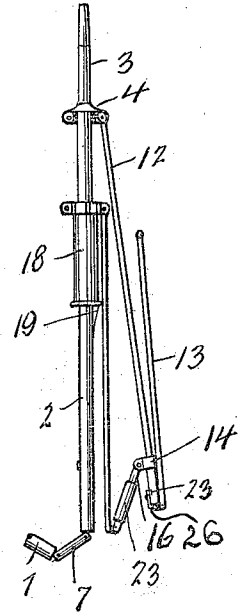
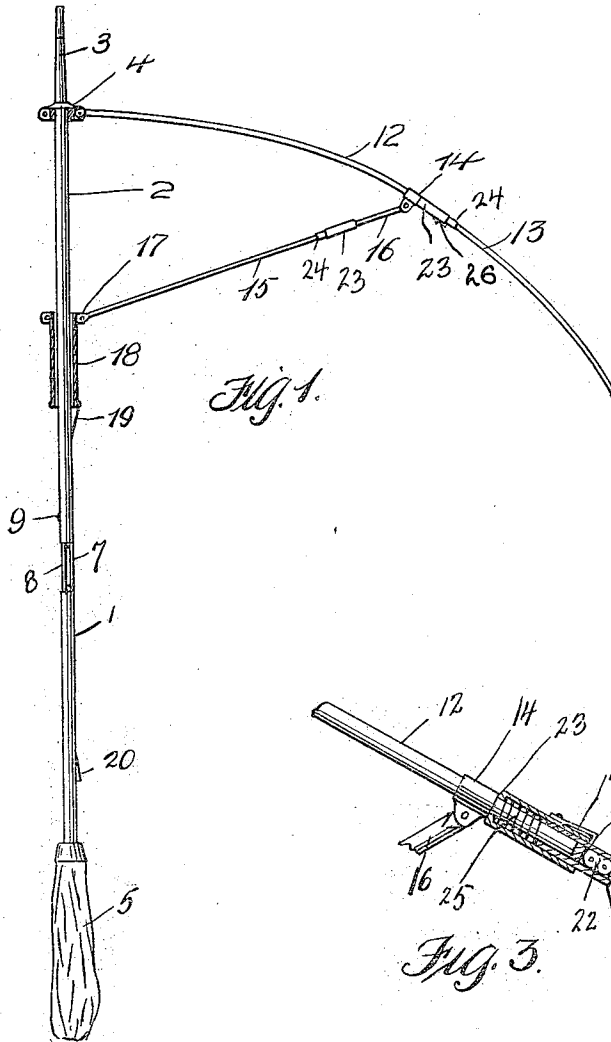


T. J. KENNEDY.
FOLDING UMBRELLA.
APPLICATION FILED SEPT. 24, 1909.

961,700.

Patented June 14, 1910.



Witnesses:—
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UNITED STATES PATENT OFFICE.

THOMAS J. KENNEDY, OF PITTSBURG, PENNSYLVANIA.

FOLDING UMBRELLA.

961,700.

Specification of Letters Patent. Patented June 14, 1910.

Application filed September 24, 1909. Serial No. 519,436.

To all whom it may concern:

Be it known that I, THOMAS J. KENNEDY, a subject of the King of Great Britain, residing at N. S. 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, and the invention has for its objects; first, to provide an umbrella that can be folded to occupy a comparatively small space without increasing the weight or dimensions of the umbrella; second, to furnish the ribs and stretchers of an umbrella with novel means whereby they can be folded without injuring the cover of the umbrella; third, to provide an umbrella that can be placed in a trunk or satchel and advantageously used by travelers; and fourth, to provide a simple, durable and inexpensive umbrella.

I accomplish the above objects by a mechanical construction that is illustrated in the drawing that will now be referred to, in which:—

Figure 1 is an elevation of the stick, one rib and spreader, the remaining ribs and spreaders being omitted. Fig. 2 is a similar view showing the stick, spreader and rib as folded. Fig. 3 is an enlarged elevation of a portion of the rib, partly broken away and partly in section. Fig. 4 is a cross sectional view of the rib on line X—X, Fig. 3. Fig. 5 is a perspective view of portions of a stick joint, and Fig. 6 is a vertical section view of a portion of the stick.

In the drawings, the reference numerals 1 and 2 denote tubular rod sections constituting the stick of the umbrella, the rod sections 2 having the conventional form of tip 3 and notched collar 4, while the rod section 1 is provided with a suitable handle 5. The confronting ends of the rod sections 1 and 2 are provided with oppositely disposed apertured lugs 6 and pivotally connected to said lugs is an intermediate semi-cylindrical section 7 permitting of the sections 1 and 2 being folded in one direction.

Slidably mounted in the sections 1, 2, and 7 is a rod 8 having the upper end thereof provided with a button 9 extending through an elongated opening or slit 10 provided therefor in the lower end of the section 2.

When the rod 8 is moved into the section 2 the umbrella stick can be folded, and when the rod 8 extends into the section 1 a rigid connection is provided between said sections.

Pivotally connected to the notched collar 4 in the ordinary manner are the ribs of the umbrella, comprising inner and outer sections 12 and 13. These sections have the confronting ends thereof reduced to provide apertured lugs 21, and these lugs are pivotally connected together by a link 22. Mounted upon the lower end of the rib section 12 is a cylindrical housing 23 for a sleeve 24 and encircling the lower end of the rib section 12 within the housing 23 is a coiled spring 25, said spring being arranged between the end of the sleeve 24 and the end of the housing 23. This spring is adapted to normally retain the sleeve 24 in an extended position inclosing the confronting ends of the rib sections 12 and 13 and the link 22, to form a stiff and rigid connection between the rib sections. It is preferable to attach the ends of the spring to the housing 23 and the sleeve 24, whereby said sleeve cannot become accidentally displaced relative to said housing. To retain the sleeve 24 within the housing 23 whereby the rib section 13 can be folded toward the rib section 12, the lower end of the housing 23 is provided with a pivoted hook-shaped catch 26 adapted to be swung to a position whereby the hooked end thereof will engage over the outer end of the housing 23 and the outer end of the sleeve 24 thereby retaining the latter within the housing. The hook or catch 26 is clearly shown in Fig. 4 and has its inner end pivoted upon the periphery of the housing 23.

The outer ends of the rib sections 12 are provided with coupling members 14 and pivotally connected to these members are the sections 15 and 16 of stretchers, said stretcher sections being connected together similar to the rib sections 12 and 13. The stretcher sections 15 are pivotally connected, as at 17 to the upper end of a runner 18 movably mounted upon the umbrella stick, said runner being held in a raised position upon the section 2 by a catch 19 and in a lowered position upon the section 1 by a catch 20, these catches being common in the present type of umbrella. The runner is of a sufficient diameter to clear the button 9 when the umbrella is in a lowered position.

It is thought that the utility and manner

of folding the umbrella is apparent from the drawing without further description, and while I have shown what I believe to be a practical embodiment of my invention, 5 still I reserve the right to make various changes in the structural elements without departing from the spirit of the invention.

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

10 1. An umbrella comprising an inner end and an outer rib section, a link attached to said sections for pivotally-connecting the opposing ends of said sections together, a housing carried by the inner rib section, a 15 spring-controlled locking sleeve extending within said housing and projecting over said link for normally maintaining the sections in an extended position, a spring surrounding the upper rib section and interposed between one end of the housing and 20 the inner end of said sleeve for normally maintaining said sleeve projected from the housing, and a hook pivotally-mounted upon the housing and adapted to be swung 25 to extend over the outer end of the housing and engage the outer end of the sleeve whereby the sleeve is retained in a retracted

position to permit of the folding of the rib sections.

2. An umbrella comprising an inner and 30 an outer rib section each provided with an apertured end, a link attached to said ends for pivotally connecting the sections together, a housing carried by the inner rib section upon the apertured end thereof, a 35 spring-controlled locking sleeve extending within said housing and normally projecting over said link for maintaining the section in an extended position, a spring surrounding the upper rib section and inclosed 40 by said housing and interposed between the upper end of the housing and the inner end of the sleeve for normally maintaining said sleeve projected, and means carried by the housing and adapted to engage the outer 45 end of said sleeve for retaining the latter in a retracted position.

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

THOMAS J. KENNEDY.

Witnesses:

MAX H. SROLOVITZ,
KARL H. BUTLER.