M. KOZLOWSKI & F. GROHAL.

FOLDING UMBRELLA.

APPLICATION FILED MAR. 28, 1914.

1,114,367. Patented Oct. 20, 1914.

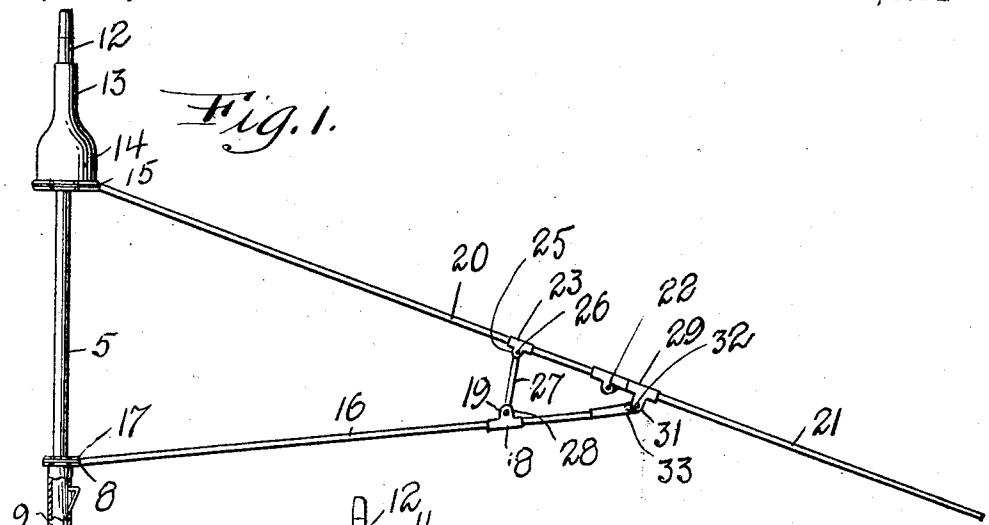


Fig. 1.

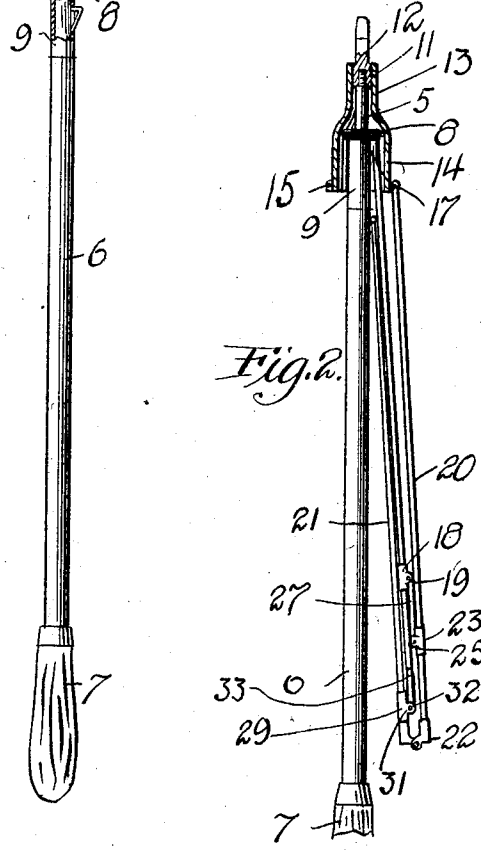


Fig. 2.

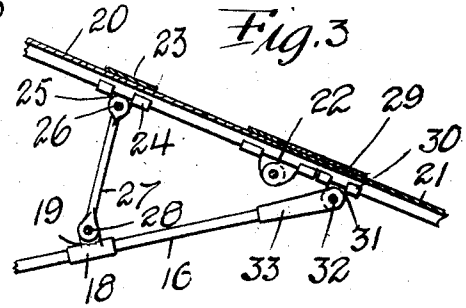


Fig. 3.

Fig. 4.

WITNESSES

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MARCIN KOZLOWSKI AND FRYNK GROHAL, OF GREENSBURG, PENNSYLVANIA.

FOLDING UMBRELLA.

1,114,367. Specification of Letters Patent. Patented Oct. 20, 1914.

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To all whom it may concern:

Be it known that we, MARCIN KOZLOWSKI and FRYNK GROHAL, subjects of the Emperor of Austria-Hungary, residing at Greensburg, in the county of Westmoreland 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 has for its object to provide an umbrella of such class, in a manner as hereinafter set forth, which can be folded in an unusual compact manner when closed.

A further object of the invention is to provide a folding umbrella, including in a manner as hereinafter set forth, a foldable rib having a bracing means therebetween and the spreader therefor.

Further objects of the invention are to provide a folding umbrella which is comparatively simple in its construction and arrangement, strong, durable, efficient and convenient in its use, readily set up and inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists of the novel construction, combination and arrangement of parts, as hereinafter more specifically described and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to 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 an elevation of an umbrella in accordance with this invention, showing the rib and handle extended, Fig. 2 is a sectional elevation, broken away, of the umbrella when folded, Fig. 3 is an elevation partly in section, of a rib and spreader, the rib being extended, and Fig. 4 is a sectional detail of the stick.

Referring to the drawings by reference characters, the stick includes a pair of sections 5 and 6, the former telescoping in the latter, and the latter is provided with a handle 7 at one end and a notch 8 at the other end. The notch 8 is carried by a sleeve 9, which is detachably connected to the inner end of the section 6, as at 10. The section 5 has a threaded extension 11 to which is secured a tip 12 and secured to said tip 12 is a cap member formed of two sections 13 and 14 of different diameters. The section 13 is of smaller diameter with respect to the section 14, and said section 13 is fixedly secured to the tip 12. The section 14, as well as the section 13, surrounds the section 5 of the stick, when the stick is extended, and the section 14 surrounds the sleeve 9 when the stick is closed. The section 14 is provided with a notch 15.

The inner diameter of the sleeve 9 is greater than the inner diameter of the section 6, so that the inner face of the sleeve 9 will frictionally engage the section 5, and under such conditions wabbling of the section 5 with respect to the section 6 is prevented, and furthermore it enables the employment of a section 5 of a diameter materially less than the inner diameter of the section 6.

The reference character 16 denotes a spreader, which is pivotally connected as at 17 to the notch 8, and is provided near its outer end with a collar 18 formed with a pair of apertured lugs 19.

Each of the ribs of the umbrella is formed of two sections, an inner section 20 and an outer section 21, and the outer end of the section 20 is pivotally connected to the inner end of the section 21, as at 22. The section 20, near its outer end has a band 23, connected thereto by bendable lugs 24, which overlap the inner faces of the section 20, and the said lugs 24 are a part of the band 23. The band 23 is furthermore provided with a pair of apertured ears 25 to which is pivotally connected as at 26 one end of a brace member 27. The other end of the brace member 27 is pivotally connected as at 28, to the ears 19.

Secured to the section 21, in proximity to its inner end is a band 29, and the latter is secured in position by bendable lugs 30, which overlap the inner face of the section 21. The lugs 30 are an integral part of the band 29, and the latter is furthermore provided with a pair of apertured ears 31, to which is pivotally connected, as at 32, a head 33 carried on the outer end of the spreader 16.

When the umbrella is extended, the member 27 is shifted to an upright position and acts as a brace between the section 20 and the spreader 16. When the umbrella is fold-

ed, the spreader 16 extends between the sections 20 and 21, and the member 27 extends parallel to the spreader 16 and section 20. When the umbrella is folded, the notch 17 carried by the section 6 is shifted into that portion 14 of larger diameter of the cap member, as clearly illustrated in Fig. 2.

What we claim is:—

1. An umbrella comprising a stick formed of two sections, one of which constitutes a handle section and is shiftable upon the other of said sections, a notch carried by the outer end of the handle section, a tip secured to the other stick section, a cap member secured to said tip and projecting inwardly therefrom and having its inner end provided with a notch, spreaders pivotally connected to the notch of the handle section, inner rib sections pivotally connected to the notch of the cap member, outer rib sections pivotally connected to said inner rib sections and to said spreaders, and brace members pivotally connected to the spreaders and said inner rib sections.

2. An umbrella comprising a stationary element having secured to one end thereof a cap member provided with a notch, a shiftable member provided with a notch capable of extending into said cap member, rib sections pivotally connected to the notch of the cap member, spreaders pivotally connected to the notch of said shiftable member and to said ribs, said ribs formed of two sections, and said spreaders pivoted to the outer of said rib sections, and brace members pivotally connected to the inner of the rib sections and to said spreaders.

In testimony whereof we affix our signatures in the presence of two witnesses.

MARCIN KOZLOWSKI.
FRYNK GROHAL.

Witnesses:
JOHN JURA,
LOUIS RENSKY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."