C. J. THIM.

FOLDING UMBRELLA.

APPLICATION FILED MAY 17, 1912.

1,066,864.

Patented July 8, 1913.

2 SHEETS—SHEET 1.

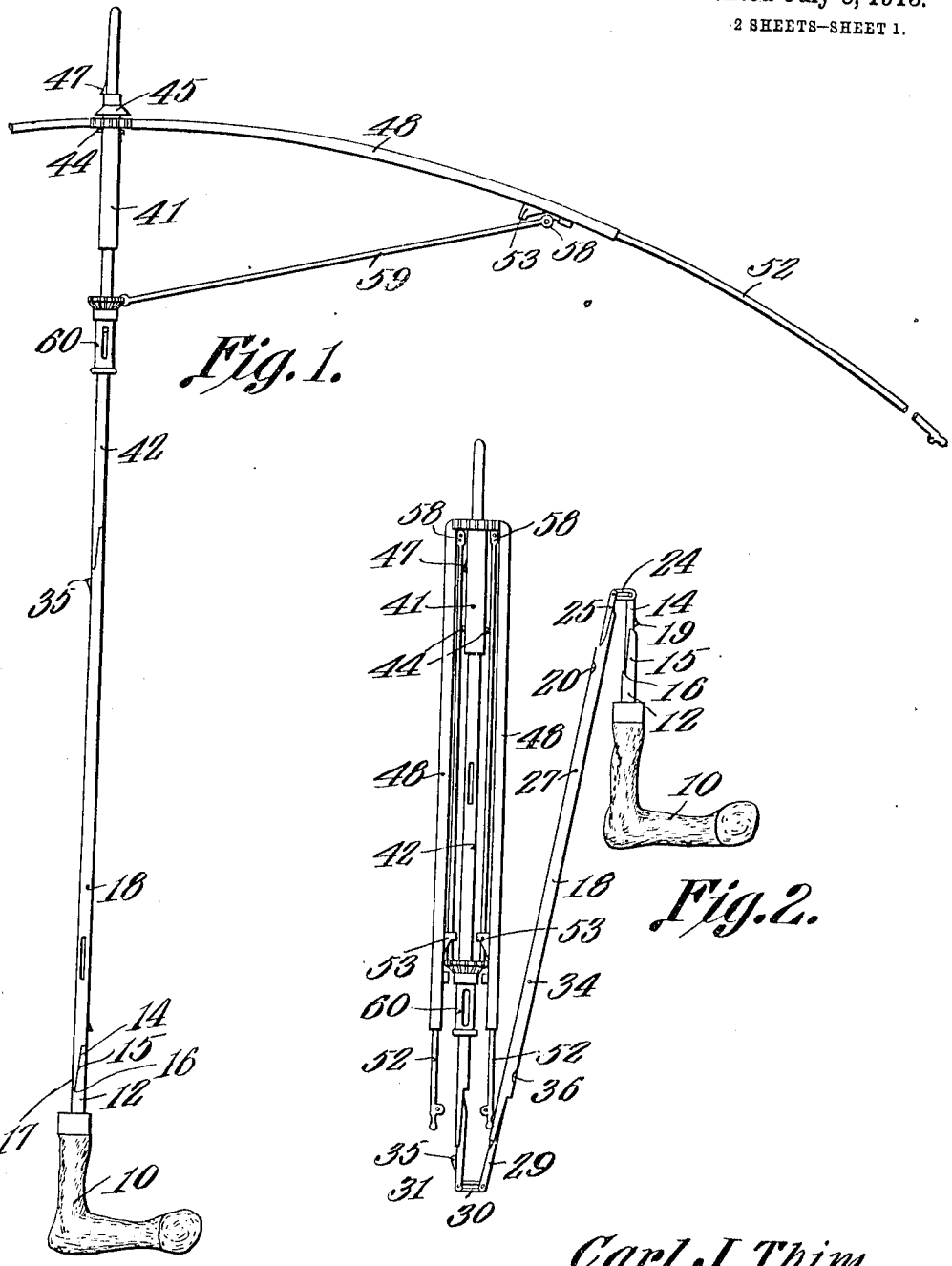


Fig. 1.

Fig. 2.

Witnesses

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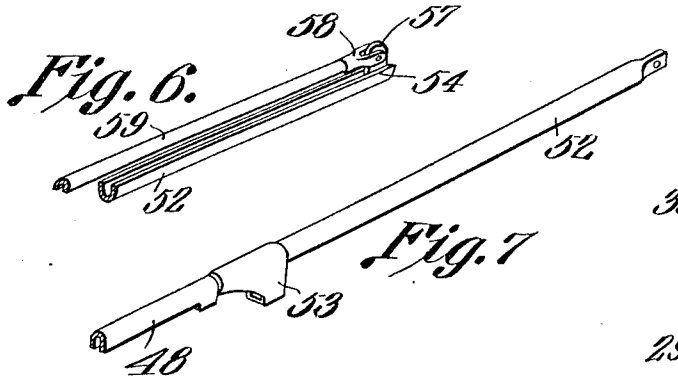


Fig. 6.

Fig. 7

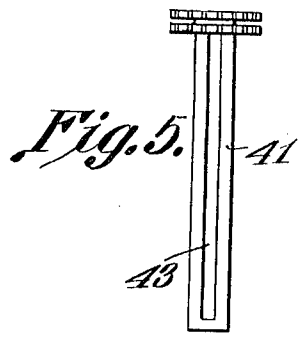


Fig. 5.

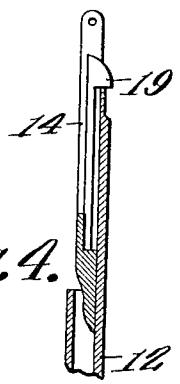


Fig. 4.

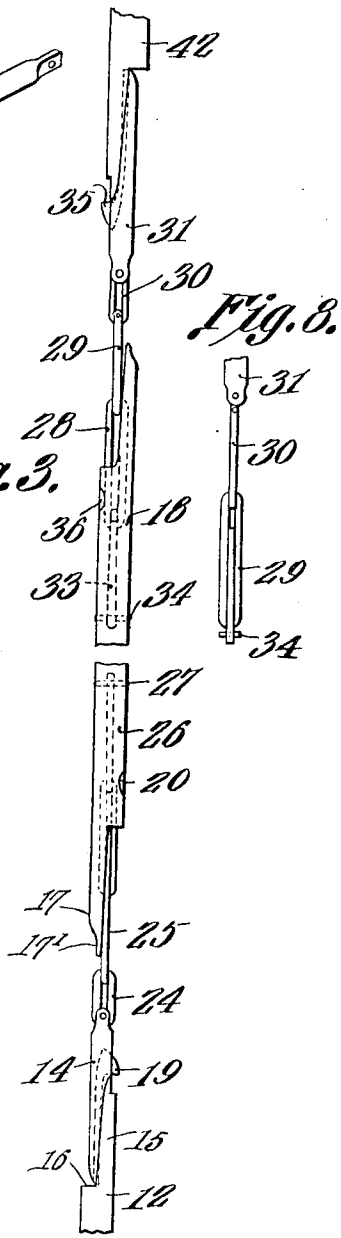


Fig. 3.

Fig. 8.

Witnesses

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CARL J. THIM, OF LOGAN, UTAH.

FOLDING UMBRELLA.

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Application filed May 17, 1912. Serial No. 697,979.

To all whom it may concern:

Be it known that I, CARL J. THIM, a citizen of the United States, residing at Logan, in the county of Cache and State of Utah, have invented a new and useful Folding Umbrella, of which the following is a specification.

This invention relates to improvement in folding umbrellas.

The primary object of the present invention is to provide a folding umbrella the staff of which is formed in a plurality of sections which are hingedly connected with means for securely locking the sections of the staff together and producing a "spliced" joint at the point where the sections are connected, whereby the sections may be positively held against separation.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings, forming a part of this specification: Figure 1 is an elevation of a portion of the umbrella in its extended position. Fig. 2 is a view of the same folded. Fig. 3 an enlarged view showing the manner of joining the sections. Fig. 4 a sectional view showing the joints between the sections. Fig. 5 a detail view of the construction adjacent the runner. Figs. 6 and 7 perspective views of the rib construction, and, Fig. 8 a detail view of one of the link connections which connect the sections of the staff.

In the drawings, 10 designates the handle, the staff 12 which projects from the same being formed with the reduced extensions 14, the portion 15 of the handle being cut diagonally and transversely forming the abutment 16 which contacts with the terminals 17 of the hollow section 18, the reduced portion 14 projecting within the hollow section. In order to hold the staff 12 within the hollow section 18 the staff is provided with the latch member 19 which when the two sections are assembled springs within the opening 20 of the hollow section. The reduced extension 14 is apertured and pivotally connected to a flat link 24 which is pivotally connected and disposed at right angles to a link 25 which is similarly connected to a link 26 secured within the hollow section 18 by the transversely disposed pin 27, it being understood in this connection that the portion 17 of the section 18 is provided with the beveled end 17′. This portion 17′ is adapted to fit within the staff 12 and wedgedly engage the latter. The portions 8 and 12 will thereby form a substantially continuous circular staff. It will thus be noted that when the two members are forced together, the links will slide one upon the other, the hollow section accommodating the folded link and the latch member will seat itself within the notch 20 of the hollow member. The hollow member 18 is formed with a similar connection as the standard 12, being connected by a link 28 with a second link 29, the link 29 being connected to a link 30 which is pivotally supported by the section 31, thus completing a joint similar to the joint between the sections 12 and 18, the link 28 being connected to a link 33 which embraces the transversely disposed pin 34. It will be noted by this construction that when the shaft is in its folded position that the sections which constitute the same may be moved to any desired position for the convenient holding of the shaft, the link connections which telescope within the shaft holding the sections together, it being noted that in folding the sections that the latch members 19 and the corresponding latch members 35 which are carried by the sections 31 being disengaged from the openings 20 and 36, this latter opening being formed in the section 18. The joints between the sections are secure when the device is in its extended position being readily disconnected when it is desired to fold the sections.

The ring or runner to which the innermost set of ribs are connected is supported by a sleeve 41 which is disposed for movement upon the tubular sections 42, the sleeve being provided with elongated slots 43 which receive the pins 44 carried by the sections 42, the gromet and sleeve being locked between pins 44 and the spring pressed latch member 47 when the umbrella is in its extended position, the ring which is carried by the sleeve being moved to the position shown in Fig. 2, after the latch member 47 has been released, when it is desired to

fold the umbrella. The inner set of ribs 48 receive the outer ribs 52 when the ribs are in their folded position, the ribs 48 being formed with guides 53 for the outer ribs. The inner terminals 54 of the ribs 52 are provided with lugs 57 which receive the bifurcated terminals 58 of the ribs 59 which connect the cover supporting ribs with the runner 60.

The many advantages of a construction of this character will be clearly apparent and it will be noted that the entire umbrella may be folded to occupy comparatively little space and that when the same is in its extended position the various sections are securely held together.

Having thus described the invention, what is claimed as new is:—

An umbrella staff comprising a plurality of sections, links connecting said sections and adapted to lie therein, the terminal of one section being provided with a projection formed integral therewith, the edges of which lie in a plane oblique to the axis of the section, a relatively small cylindrical member mounted upon said section terminal and extending beyond said projection, the adjacent section being provided with a projection integral therewith the edges of which are in a plane oblique to the axis of said section, the end of said last mentioned projection being provided with an interlapping end adapted to extend within the first mentioned section to thereby form a substantially circular continuous staff, a spring latch member carried by one terminal of the sections and arranged to enter an aperture formed in the adjacent section.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CARL J. THIM.

Witnesses:
A. A. LAW,
CLAIRE F. CRANNEY.

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