

L. F. TEETS.

UMBRELLA.

APPLICATION FILED NOV. 30, 1907.

907,916.

Patented Dec. 29, 1908.

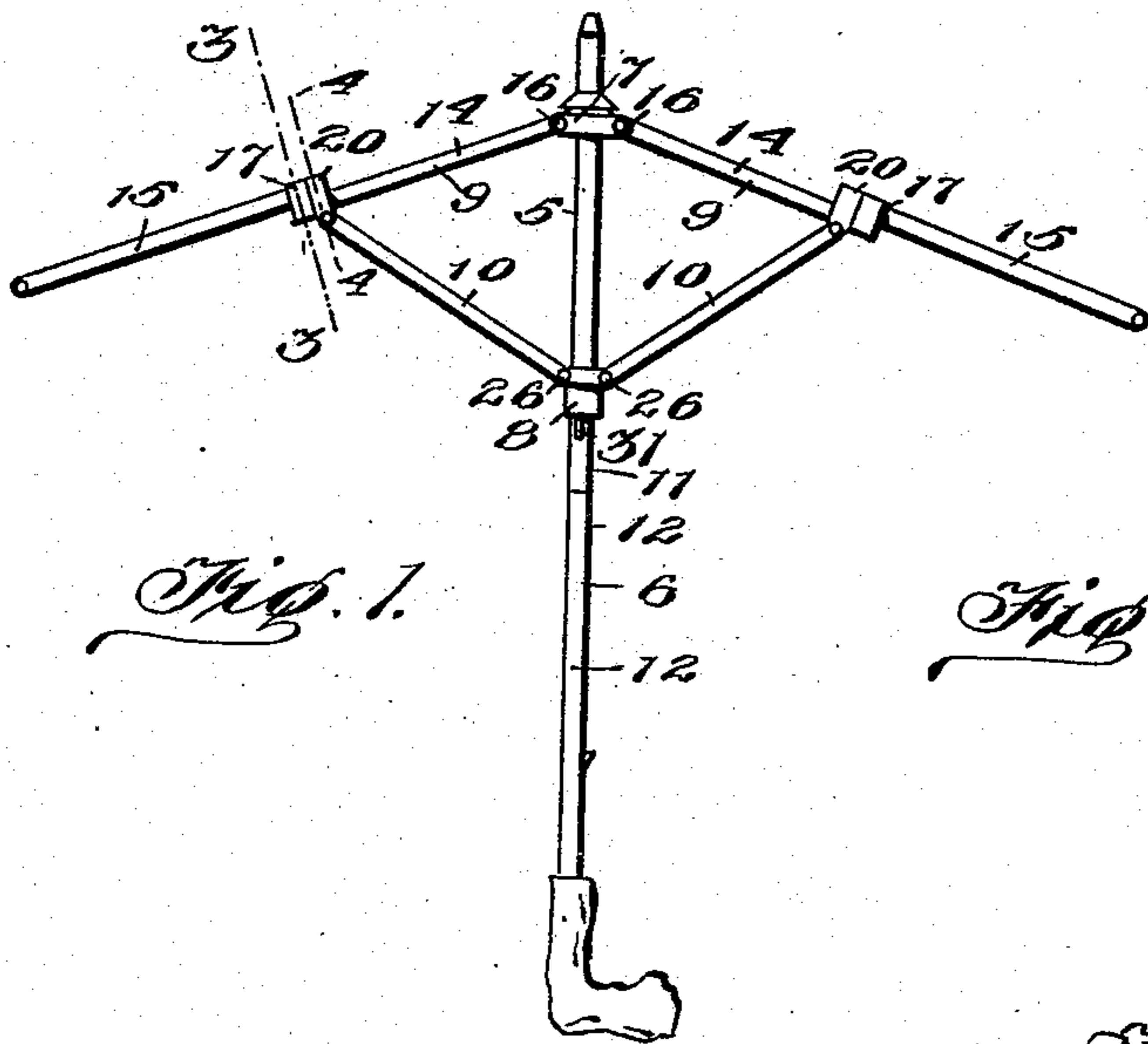


Fig. 1.

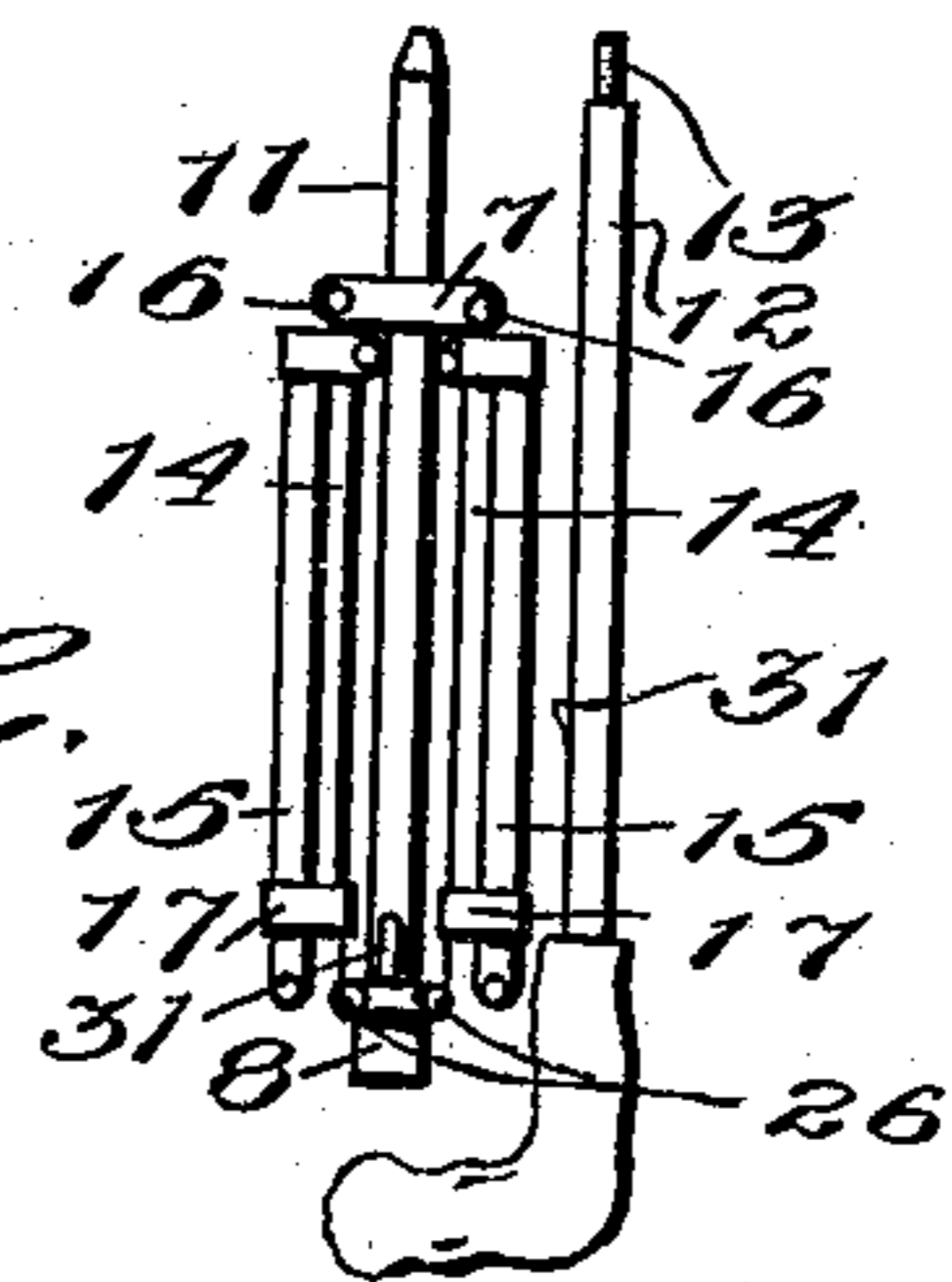


Fig. 2.

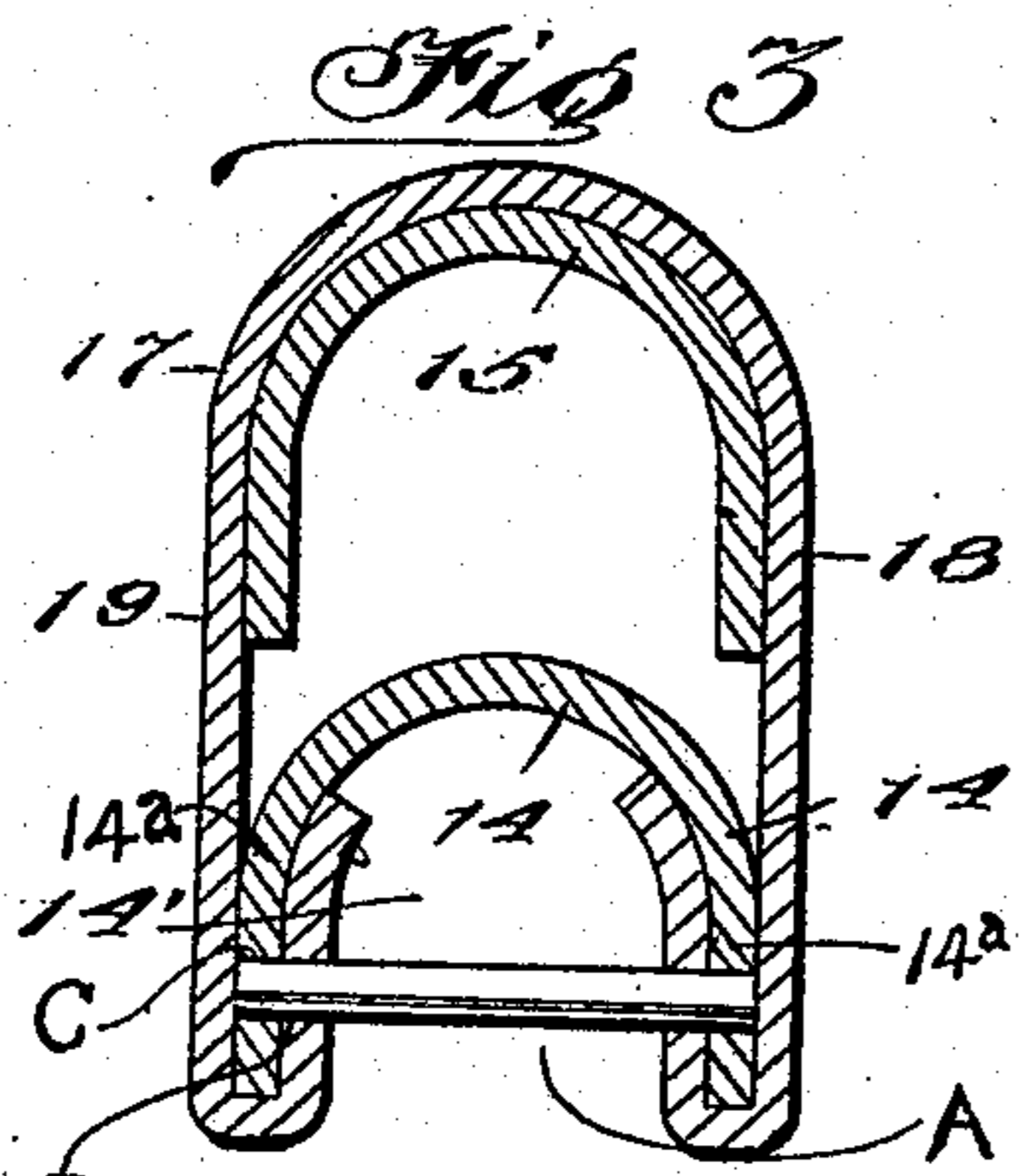


Fig. 3.

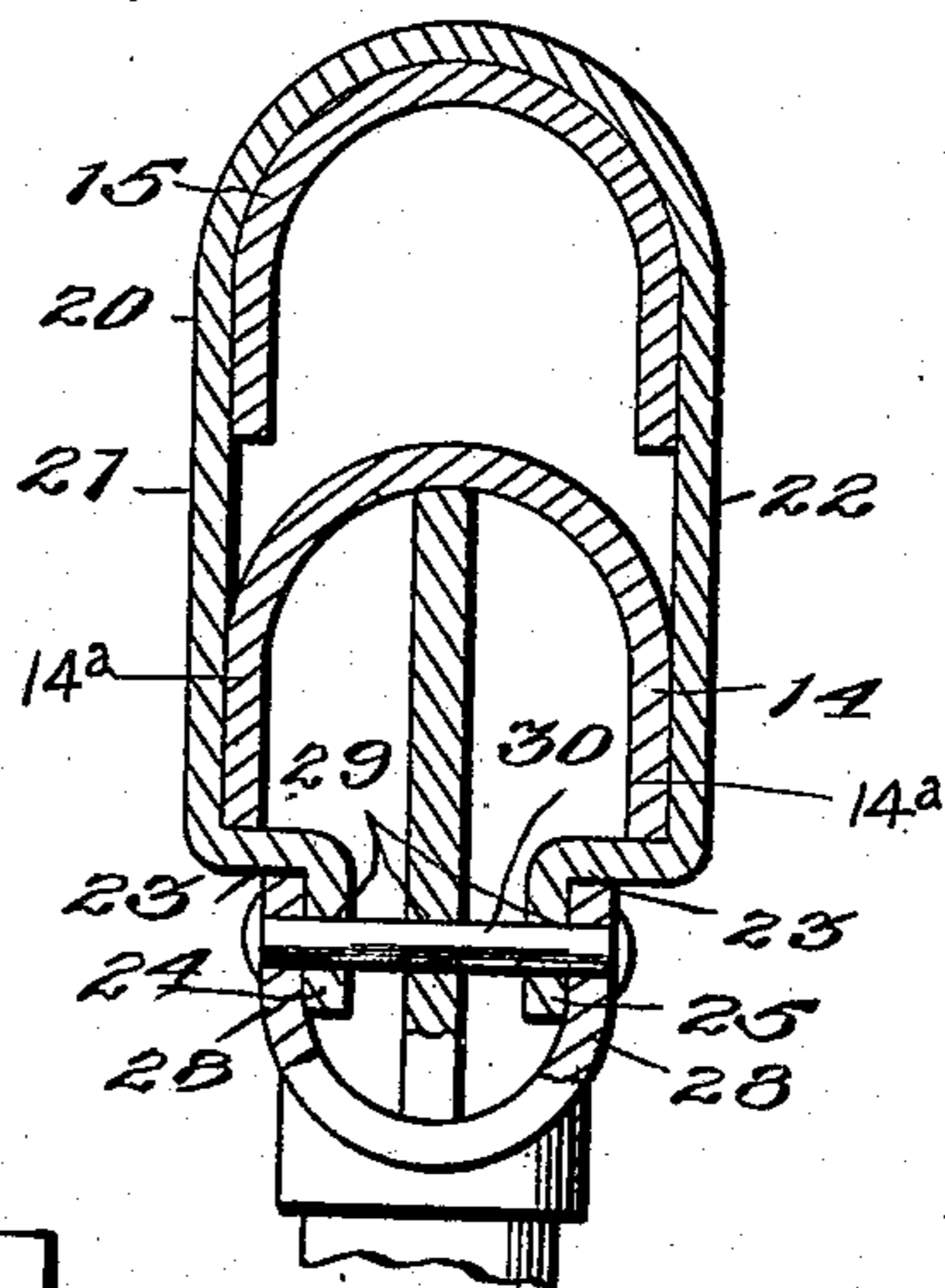


Fig. 4.

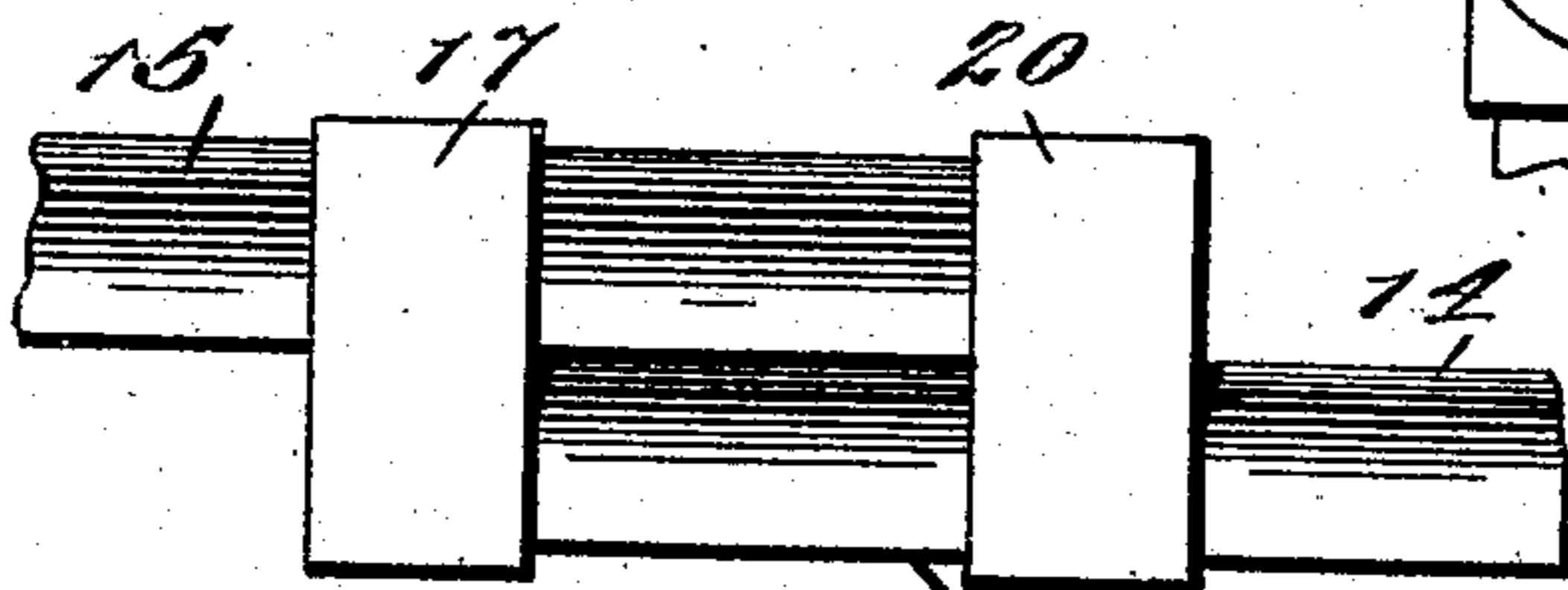


Fig. 5.

Witnesses

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# UNITED STATES PATENT OFFICE.

LAWRENCE FREDERICK TEETS, OF RALSTON, NEW JERSEY.

## UMBRELLA.

No. 907,916.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed November 30, 1907. Serial No. 404,538.

*To all whom it may concern:*

Be it known that I, LAWRENCE FREDERICK TEETS, a citizen of the United States, residing at Ralston, in the county of Morris and State of New Jersey, have invented certain new and useful Improvements in Umbrellas, of which the following is a specification.

This invention relates to umbrellas, and more particularly to folding umbrellas, and has for its object to provide an umbrella which may be folded into small compass when not in use.

Other objects and advantages will be apparent from the following description and it will be understood that changes in the specific structure shown and described may be made within the scope of the claim without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevational view of an umbrella frame, Fig. 2 is a similar view showing the frame in a folded position, Fig. 3 is a cross sectional view on the line 3—3 of Fig. 1, Fig. 4 is a similar view on the line 4—4 of Fig. 1, Fig. 5 is an enlarged side elevational view of a portion of the rib and stretcher.

Referring now more particularly to the drawings, there is shown an umbrella frame consisting of a stick 6, the top notch 7, the runner 8, the ribs 9, and the stretchers 10 therefor. The stick 6 is preferably made in two parts 11 and 12 respectively, and these parts are connected by a threaded joint 13, as shown. Each rib 9 for the frame consists of an upper section 14 and a lower slidable section 15, and the upper section 14 is pivoted to the notch 7, as shown at 16. The upper section 14 is arranged to lie normally with its outer end beneath the inner end of the lower section 15, and this section 14 is provided at its outer end with a guide member 17 which slidably receives the lower section 15, as shown. The guide member 17 has side portions 18 and 19 arranged at either side of the members 14 and 15, and the free ends of this member are bent to extend within the usual groove 14' of the section 14, and these ends of the member 17 are secured within the portion 14', by means of a pin A engaged at its ends in openings B in the end portions of the member 17 and in similar openings C formed in the side portions 14<sup>a</sup> of the rib. The lower section 15 is provided

with a similar guide member 20, and this member is soldered or otherwise secured to the section 15. The member 20 is provided with portions 21 and 22 which are arranged to lie at either side of the sections 14 and 15, and the metal of this member below the section 14 is pressed inwardly as shown to extend over the lower edges of the portions 14<sup>a</sup>, and from these portions the metal of the member is extended downwardly to form spaced ears 24 and 25 respectively.

The stretchers 10 are pivoted as shown at 26 to the runner 8, and at the opposite end, each stretcher is provided with an attaching member 27, and this member is provided with ears 28 which are arranged to lie at either side of the ears 24 and 25. The outer end of the stretcher 10 is arranged to lie between the ears 24 and 25 and the portions 23, and this portion of the stretcher is extended within the groove 14<sup>a</sup> of the section 14. The ears 24, 25 and 28 and the inner end of the stretcher 10 are provided with alining perforations 29, and these perforations are thus arranged to receive a pivot pin 30.

The stick 6 is provided with the usual runner engaging latches 31, as shown. The operation of the umbrella is the same as that of an ordinary umbrella, when it is desired to use the umbrella for ordinary purposes, but in transportation of the umbrella when it is desired to reduce the same in size, it may be stated that the lower section 15 of each rib 9 is pushed upwardly, until the umbrella is in a complete folded position, after which the lower part 12 of the stick 6 is removed from the upper part 11, and the umbrella is thus folded into a convenient package. As will be seen, the stretchers are connected to the inner ends of the outer sections 15, the members 17 acting as stops for engagement by the members 20.

What is claimed is:

In an umbrella rib, the combination with an upper section grooved to present downwardly extending spaced portions, of a guide member having end portions bent to extend upwardly against the inner faces of the side portions, said guide member also including portions extending upwardly against the outer faces of the side portions and above the upper section of the rib, a lower rib section slidably engaged in the guide member above the upper rib section, a guide member carried by the inner end of the lower rib section

and including portions extending downwardly over the sides of the upper rib sections, said guide member also including portions extending inwardly over the lower  
5 edges of the spaced side portions of the upper sections and then extending downwardly to form spaced ears, a stretcher, ears carried by the stretcher lying against the outer faces of the first named ears, said stretcher having its  
10 end portion extended between the ears and

into the groove of the upper section, and a pivot pin engaged in the said end portion of the stretcher and in the ears.

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

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Witnesses:

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