

No. 885,804.

PATENTED APR. 28, 1908.

W. B. THINES.
UMBRELLA.

APPLICATION FILED JUNE 26, 1906. RENEWED SEPT. 19, 1907.

Fig. 1.

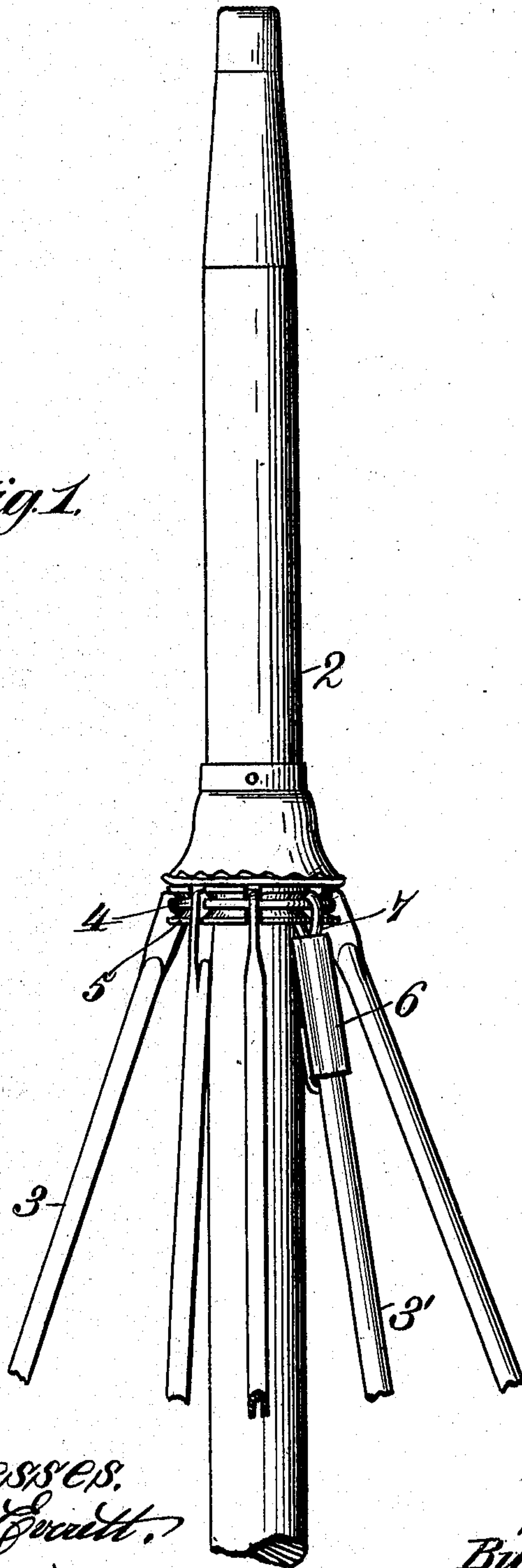
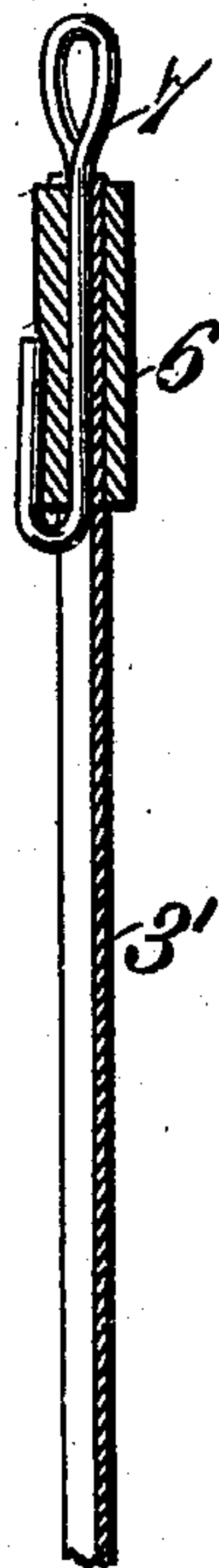


Fig. 2.



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UNITED STATES PATENT OFFICE.

WILLIAM B. THINES, OF TRENTON, NEW JERSEY.

UMBRELLA.

No. 885,804.

Specification of Letters Patent.

Patented April 28, 1908.

Application filed June 26, 1906, Serial No. 323,502. Renewed September 19, 1907. Serial No. 393,689.

To all whom it may concern:

Be it known that I, WILLIAM B. THINES, a citizen of the United States, residing at Trenton, in the county of Mercer and State of New Jersey, have invented new and useful Improvements in Umbrellas, of which the following is a specification.

This invention relates to umbrellas. I employ this term in a broad sense to include not only articles known as umbrellas, but similar articles, such as parasols. My invention resides particularly in a simple and effective means for repairing the ribs of umbrellas, such means being of such a character that an inexperienced person can quickly and readily mend a broken rib. At the upper ends of umbrellas as ordinarily made there are eyes by means of which said ribs can be strung upon a band of wire or equivalent device surrounding a sleeve on the stick. These eyes easily break through, whereby the ribs become separated from said wire band.

It is the primary object of my invention to provide for the operative connection of the ribs with said wire band or analogous instrumentality when the eyes of such ribs break.

My invention which is in the nature of an umbrella attachment or an article of manufacture comprises a tube to fit an umbrella rib, said tube being provided with an attaching member, which attaching member may consist of a loop of wire to be connected with the wire band or similar device to which I have hereinbefore referred.

In the drawings accompanying and forming part of this specification I show one form of embodiment of the invention, which to enable those skilled in the art to practice said invention, I will set forth at length in the following description, while the novelty of the invention will be included in the claims succeeding said description.

Referring to the drawings, Figure 1 is an elevation of a portion of an umbrella in which is incorporated an attachment embodying my invention. Fig. 2 is a longitudinal sectional view of said attachment.

Like characters refer to like parts in both figures of the drawing.

In the drawing I show part of an umbrella of ordinary construction, the same including a stick as 2 and ribs as 3. One of these ribs which I shall designate by 3' is equipped with an attachment involving my invention as will hereinafter particularly appear. The upper or inner ends of the ribs 3 have eyes by

which said ribs can be strung on a band as 4 which may consist of wire lying in a peripheral groove in the collar 5 surrounding and permanently fastened to the stick near the ferrule end thereof as usual in umbrellas.

As is well known, the eyes on the inner ends of the ribs frequently break out so that in such case the umbrella is for the time being useless. This is an annoying trouble particularly in the case of a storm. To avoid the annoyance and trouble mentioned is the object of my attachment which can be applied in place in a ready, quick and inexpensive manner.

The attachment includes a tube as 6 which may be made from any desirable material. This tube is adapted to embrace a rib. I have shown it as surrounding in Fig. 1 the rib 3', the eye of which has been broken. I provide means for attaching the tube 6 in place and such attaching means may be of any desirable material, for example, the loop 7 which may be inexpensively made from wire and which in the present case is adapted for connection with the band 4.

It will be assumed that the eye of the rib 3' has broken through and in this case such rib becomes separated from the band 4. To repair the broken rib I may proceed as follows: Initially I slip over the inner portion of the broken rib 3' the tube 6, such tube when first applied to the rib being loose thereon. I then pass between the band 4 and the collar 5 a piece of wire to form the loop 7. I then double the wire on itself to form a loop, the loop in the present case having side branches or arms of approximately equal length and constituting a suitable shank for the loop. I then place the branches of the loop against the upper end of the broken rib and advantageously put them in the channel usually present in such rib, following this I slide the sleeve over the branches of the loop a distance sufficient to leave the lower or outer ends of the side branches projecting from the outer end of the tube. With a pair of pincers, or in some other suitable manner I now squeeze the tube so that it will tightly grip the rib and thereby prevent the tube from moving. For this purpose the said tube is ordinarily made from some compressible material such as lead, although this is not essential. After compressing the tube tightly onto the broken rib I bend back the free portions of the branches or arms of the loop onto and press

them solidly against the exterior surface of the tube 6. When the tube is made of compressible material the free portions of the branches of the loop can be forced thereinto
5 so as to positively prevent the loop from opening out.

From what has been hereinbefore described it will be evident that the attachment can be put in place in a short space of time
10 and that the operation attending the same is a simple one and can be performed by persons not possessing unusual mechanical skill. In other words, in case the eye of an umbrella rib breaks out it is not necessary to
15 call in an umbrella expert to repair the damage. The attachment is of exceedingly simple nature and quite inexpensive, while it effectually performs the offices for which it is intended. It will be evident that the
20 loop 7 serves the purpose of an eye for the broken rib; in other words, it constitutes a hinge member for said broken rib.

The attachment may be used at other places in an umbrella than that to which I

have hereinbefore referred, for example, it 25 may be located at the junction of the brace ribs and slide or where the brace ribs are united with the main ribs.

What I claim is:

1. An umbrella attachment comprising a 30 metallic tube to fit an umbrella rib, and a metallic attaching loop separate therefrom, the loop having a shank to extend through the open outer end of the tube, into the interior of said tube to constitute a hinge for 35 the rib to which said tube is fitted.

2. An article of manufacture consisting of a tube to fit an umbrella rib, and a loop serving as a hinge for said rib, said loop having a shank extended through the tube and bent 40 back on the latter.

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

WILLIAM B. THINES.

Witnesses:

WALTER L. COX,
J. W. DICKINSON.