

(No Model.)

N. ILLOWAY.  
UMBRELLA.

No. 597,717.

Patented Jan. 25, 1898.

Fig. 1.

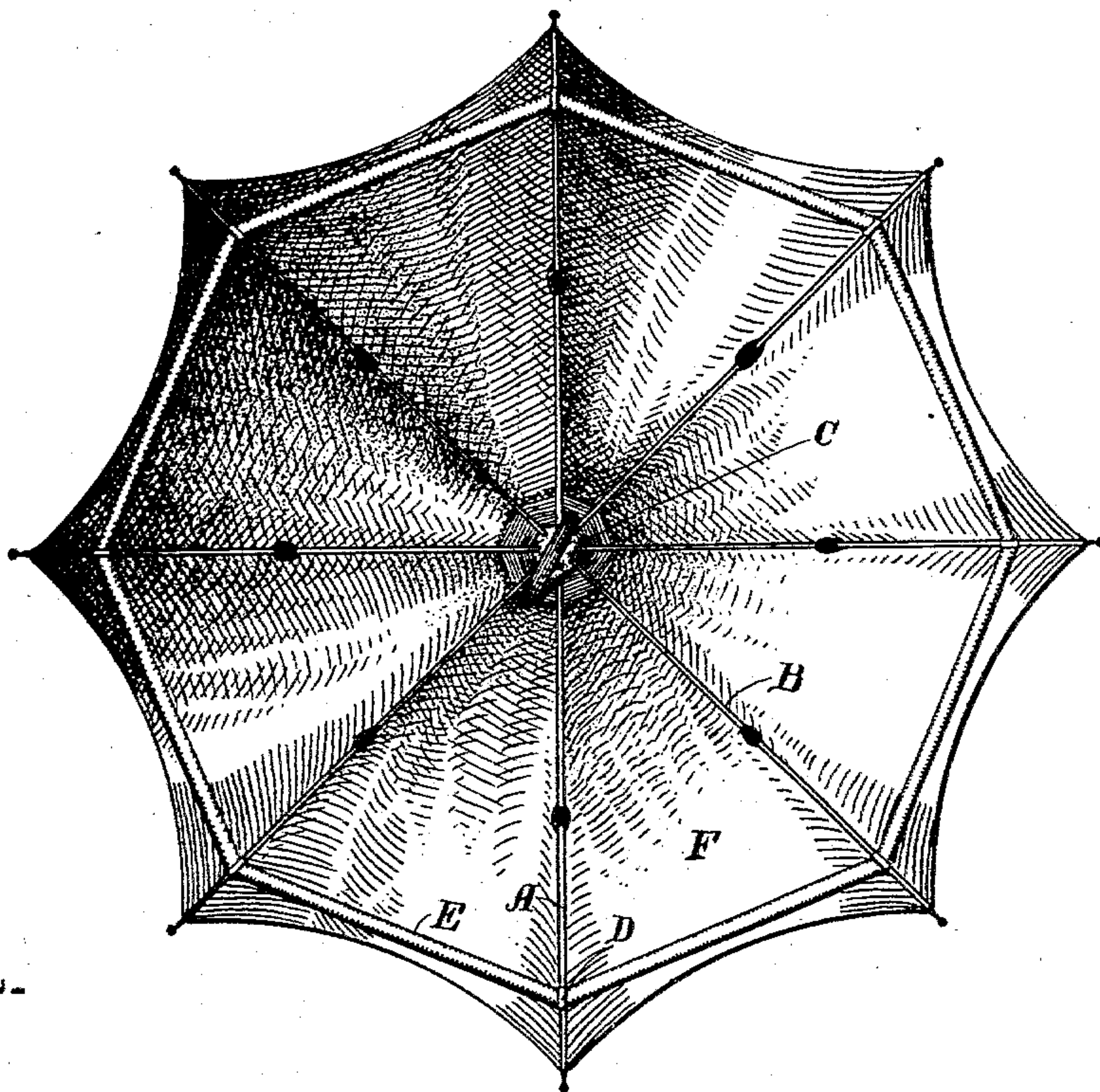
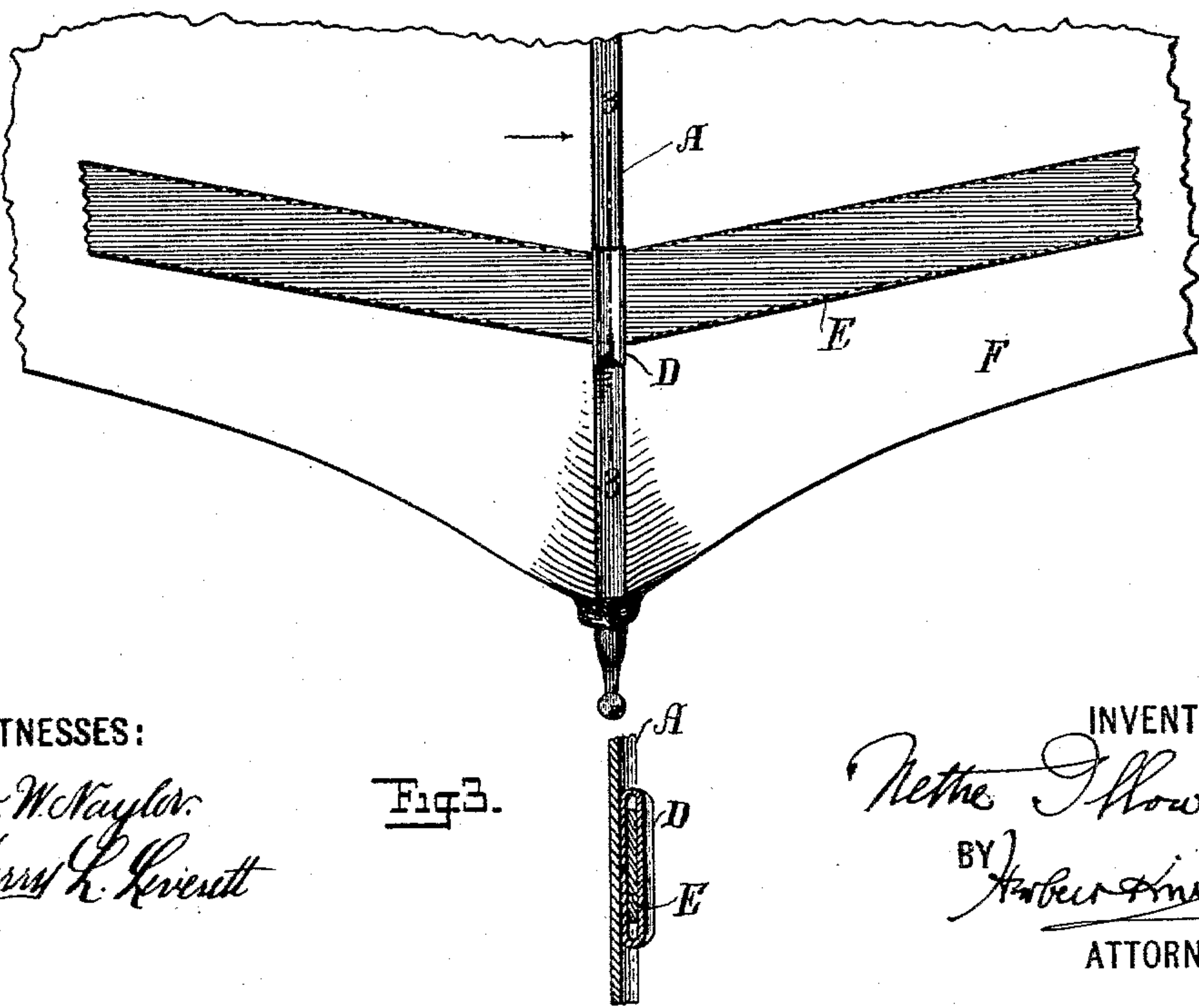


Fig. 2.



WITNESSES:

*Geo. W. Naylor.*  
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Fig. 3.

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# UNITED STATES PATENT OFFICE.

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## UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 597,717, dated January 25, 1898.

Application filed March 26, 1897. Serial No. 629,297. (No model.)

*To all whom it may concern:*

Be it known that I, NETTIE ILLLOWAY, a citizen of the United States, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Umbrellas, of which the following is a specification.

The invention relates to a means for reinforcing the umbrella in such a manner that it will not turn inside out or double upon itself during a wind-storm or at other times when it is subjected to a sudden strain from the in or under side.

My invention consists of a narrow band of satin ribbon, vulcanized rubber, or other material extending around and preferably upon the inside of the umbrella and at a short distance from the outer edge or periphery thereof, being so made and arranged that such band or strip will not in any manner give. Said band, being supported in a manner substantially as hereinafter described, will keep the umbrella-frame to its true and proper form and effectually prevent collapse, as aforesaid.

The reason for the efficiency of my invention applied in the manner described is that the material of which umbrellas are made is, and has to be from the nature of the case, cut on the bias, which permits stretching of the fabric and undue expansion at times, thus causing the ribs to bend upon themselves and permit the entire frame to be reversed and carrying the fabric cover with it. My invention is intended to obviate this difficulty and to effectually keep the ribs and cover in their proper position by preventing the ends of the ribs from stretching beyond their proper place and effectually retaining the dome-shaped structure of the umbrella at all times.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 is an inside view of an umbrella with my invention applied. Fig. 2 is a detail view to a larger scale. Fig. 3 is a detail sectional view on the line 3 3, Fig. 2.

At A are shown the umbrella-ribs, connected by the stretchers B to the ordinary rubber C. Affixed to the ribs A at D are keepers or eyes, through which extends a band or strip E. This band or strip is secured by sewing or otherwise to the fabric or cover F of the umbrella.

In Fig. 2 I have shown how the band or strip lies in the eye or keeper, and I also show that although the band or strip is securely fixed to the fabric or cover it may have, nevertheless, a slight play therein. The object of this slight movement is to afford means for preventing undue strain or pull where the fabric lies near the rib, and thus obviate tearing at this point, while the rigidity and inflexibility of the band or strip as a whole is maintained. As before explained, the object of this band or strip is to keep secure and constant the integrity of the general and proper contour of the umbrella, and the band or strip, attached to the fabric between the ribs and anchored to the ribs, as shown, will accomplish this purpose by reason of the fact that it will not stretch or lengthen under pressure. Thus the ribs of the umbrella will be kept, with such slight variation as explained, to their proper places and will be prevented from doubling on themselves or folding backward at all times. This reinforce band or strip may be of silk or any other fabric sewed onto or otherwise attached to the umbrella-cover and simply affixed to the ribs, or the band or strip may be a part of the cover itself, or it may be formed of vulcanized rubber or other material, such as metal strips or pieces, and, in fact, in any suitable manner which will serve to maintain the proper shape of the umbrella and prevent the improper or undue spreading of the ribs at all times—in other words, to keep the umbrella in its elevated position, where the ribs, their connected stretchers, and the attached runner naturally sets them by the proper notch or lock.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In an umbrella, a reinforce located near its outer edge and extending entirely around the umbrella, fixed to the cover at points between the ribs, the said ribs being provided with keepers or eyes through which the band or strip extends, all arranged as and for the purposes set forth.

NETTIE ILLLOWAY.

Witnesses:

HERBERT KNIGHT,  
J. GREEN.