

(Model.)

W. B. DIMON.

UMBRELLA.

No. 387,628.

Patented Aug. 14, 1888.

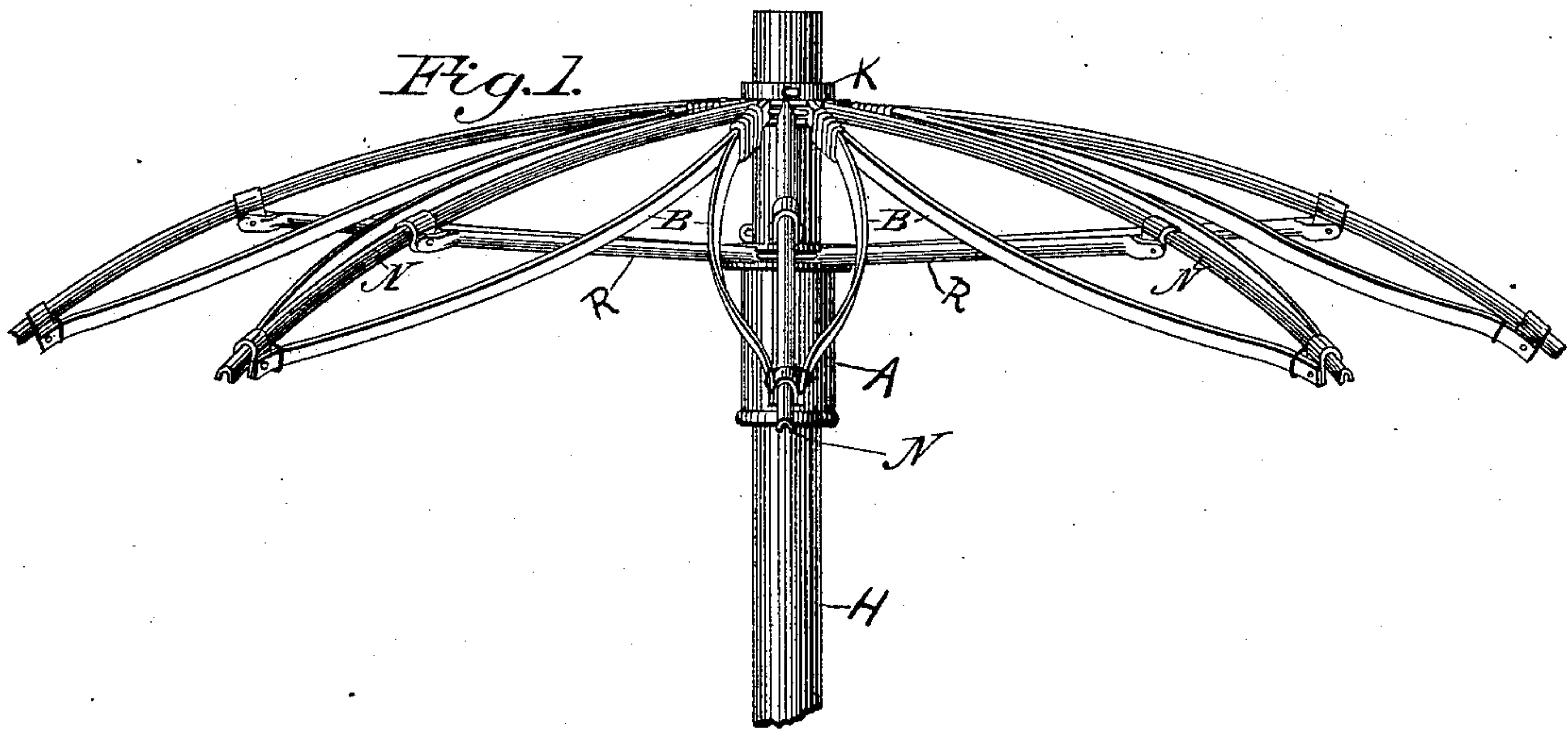


Fig. 2.

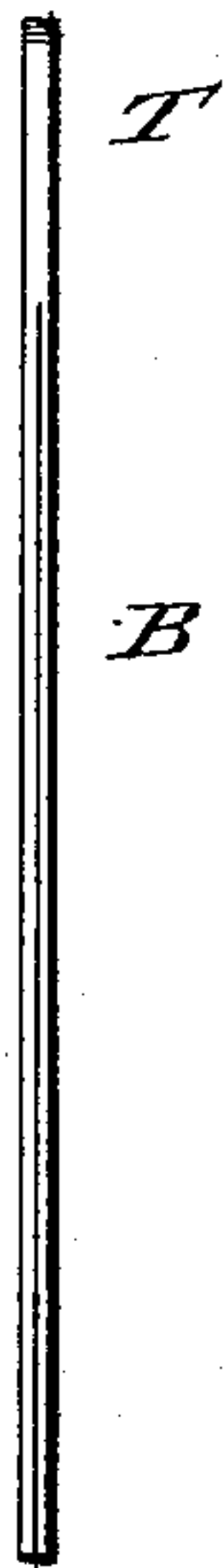


Fig. 3.

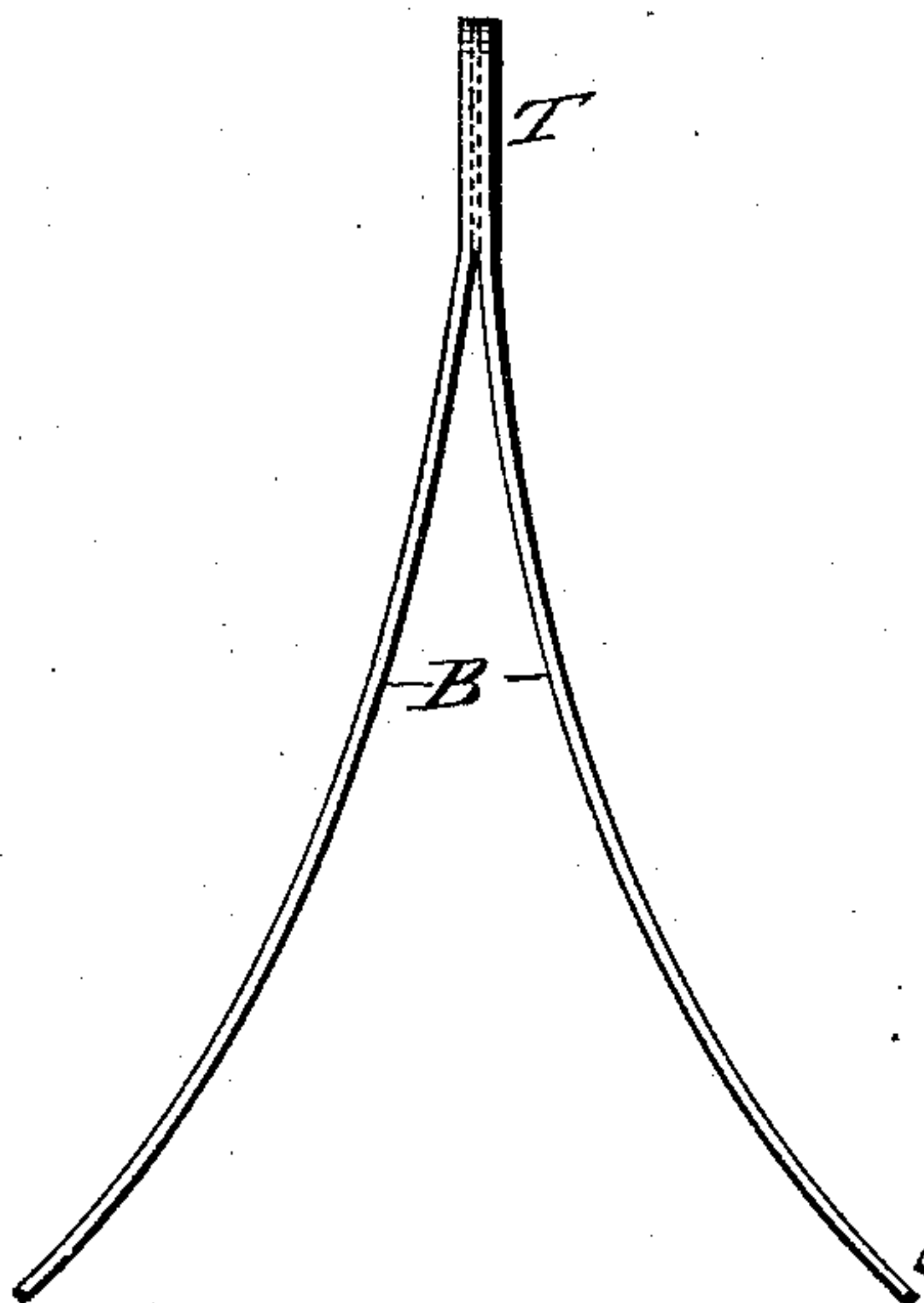
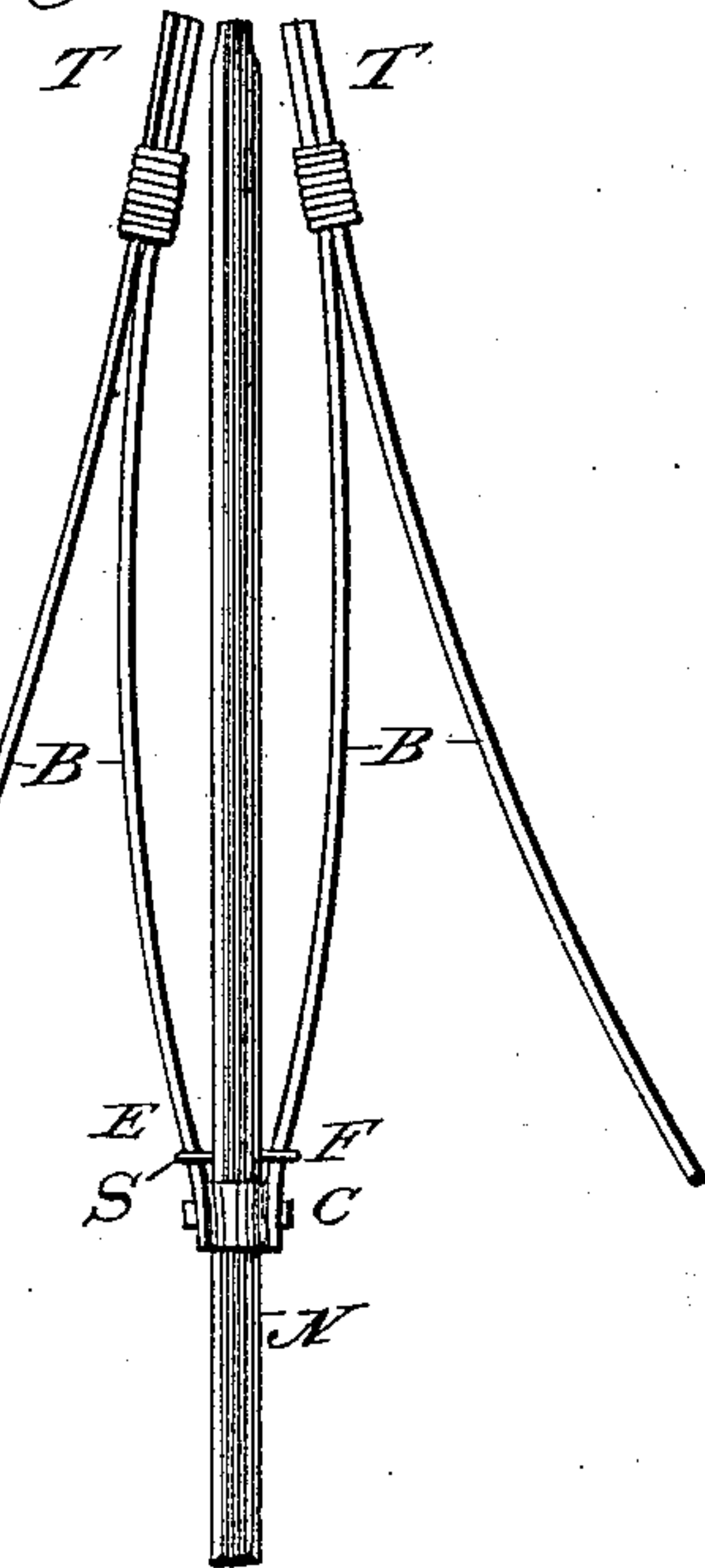


Fig. 4.



Witnesses:

Gratam Calvert.

Samuel L. Taylor.

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UNITED STATES PATENT OFFICE.

WILLIAM B. DIMON, OF PHILADELPHIA, PENNSYLVANIA.

UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 387,628, dated August 14, 1888.

Application filed July 30, 1887. Serial No. 244,678. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM B. DIMON, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Umbrellas and Parasols, of which the following is a specification.

My invention relates to an improvement in the construction of umbrellas and parasols.

The objects of my invention are to strengthen the ordinary umbrella or parasol frame; to keep the umbrella or parasol from being blown out of shape or turned inside out by the wind; to keep the umbrella or parasol open without the aid of a spring in the umbrella or parasol stick for the umbrella or parasol runner to rest on, and to curve the umbrella or parasol ribs, thereby taking some of the strain from the covering material and making the umbrella or parasol more durable; and my invention consists of a double auxiliary umbrella or parasol rib.

In the accompanying drawings, Figure 1 shows the arrangement of the double auxiliary ribs with the ordinary umbrella or parasol ribs and stretchers. Fig. 2 shows a double auxiliary rib. Fig. 3 shows a double auxiliary rib in the position it assumes when separated by force, and Fig. 4 shows the manner of attaching the double auxiliary ribs to the ordinary ribs.

Similar letters refer to similar parts throughout the several views.

A is the runner, to which the stretchers R R are attached.

B B are the double auxiliary ribs.

C is the rivet-joint connecting the ends E F of the double auxiliary ribs to the ordinary ribs. N N are the ordinary ribs. The two ends E F of the double auxiliary ribs are encircled near the rivet C by a small piece of metal, S, Fig. 4.

H is the stick, near the top of which is attached the top notch, K.

T is the head of the double auxiliary ribs.

The double auxiliary ribs and the ordinary ribs are held in the top notch by the same wire, all as shown in Fig. 1 of the drawings.

A piece of spring-steel is folded in the middle toward the ends, so that both halves will lie

close together. The ends which meet in the folding are the tips of the double auxiliary ribs, which are to be left free. The end which is made by folding the spring-steel piece in the middle is the head of the double auxiliary rib. This head is to be fastened with a spiral wire, ring, rivet, or other fastening. The distance of the fastening from the end of the head of the double auxiliary rib is to be determined by the amount of curvature required in the ordinary umbrella or parasol ribs and stretchers, with which the double rib is to be combined. The nearer the fastening is to the end of the head of the double auxiliary rib, the less it curves the ordinary rib. The farther the fastening is removed from the end of the head of the double auxiliary rib, the more it curves the ordinary rib. The head or fastened end and the tips or free ends of the double auxiliary ribs are perforated. The right tip of one double auxiliary rib and the left tip of another are riveted to one ordinary umbrella or parasol rib by means of a rivet-joint. The head of the double auxiliary rib is held secure by means of a wire placed in a groove or channel in the top notch, as in the ordinary constructions. The length of the double auxiliary rib is determined by the amount of curvature required to be given to the umbrella or parasol.

The longer the double auxiliary rib is made in conjunction with the fastening at the head, the more it curves the umbrella or parasol ribs with which it is combined. The shorter the double auxiliary rib is made, in conjunction with the fastening at the head, the less it curves the umbrella or parasol with which it is used.

The elastic force is retained in the double auxiliary ribs B B, Fig. 1, by opening the umbrella or parasol beyond the balance-point of the ordinary umbrella or parasol ribs and stretchers. By the sliding of the runner up and down the stick the double auxiliary rib seeks to regain its original position, but is prevented from so doing by means of the stop in the umbrella or parasol stick, which stop allows the double auxiliary rib to sustain the ordinary umbrella or parasol ribs and stretchers N, Fig. 1, in an opened position.

In opening the ordinary umbrella or parasol,

combined with the double auxiliary ribs, the resistance offered by the said ribs to the ordinary umbrella or parasol ribs and stretchers, to retain their original position shown in Fig. 2, will cause the ordinary umbrella or parasol rib to curve more or less, as hereinbefore described. The more the ordinary umbrella or parasol ribs are curved by the hereinbefore-described method, the greater is the elastic force of the double auxiliary ribs.

The curving of the ordinary umbrella or parasol ribs, in conjunction with the curving of the double auxiliary ribs, illustrates that the umbrella or parasol will not be blown out of shape or turned inside out by the wind when these two sets of ribs are combined in the same umbrella or parasol.

The curving of the ordinary umbrella or parasol ribs shows that some of the strain will be taken from the covering material when the double auxiliary ribs are used, thereby rendering the umbrella or parasol more durable.

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

In an umbrella or parasol, the combination, with the ordinary ribs and stretchers, of double auxiliary ribs, substantially as described and shown.

Philadelphia, July 16, 1887.

WILLIAM B. DIMON.

Witnesses:

GRAHAM CALVERT,
SAMUEL L. TAYLOR.