

C. O. Buell, Umbrella.

No. 67,162.

Patented July 30, 1867.

Fig. 3.

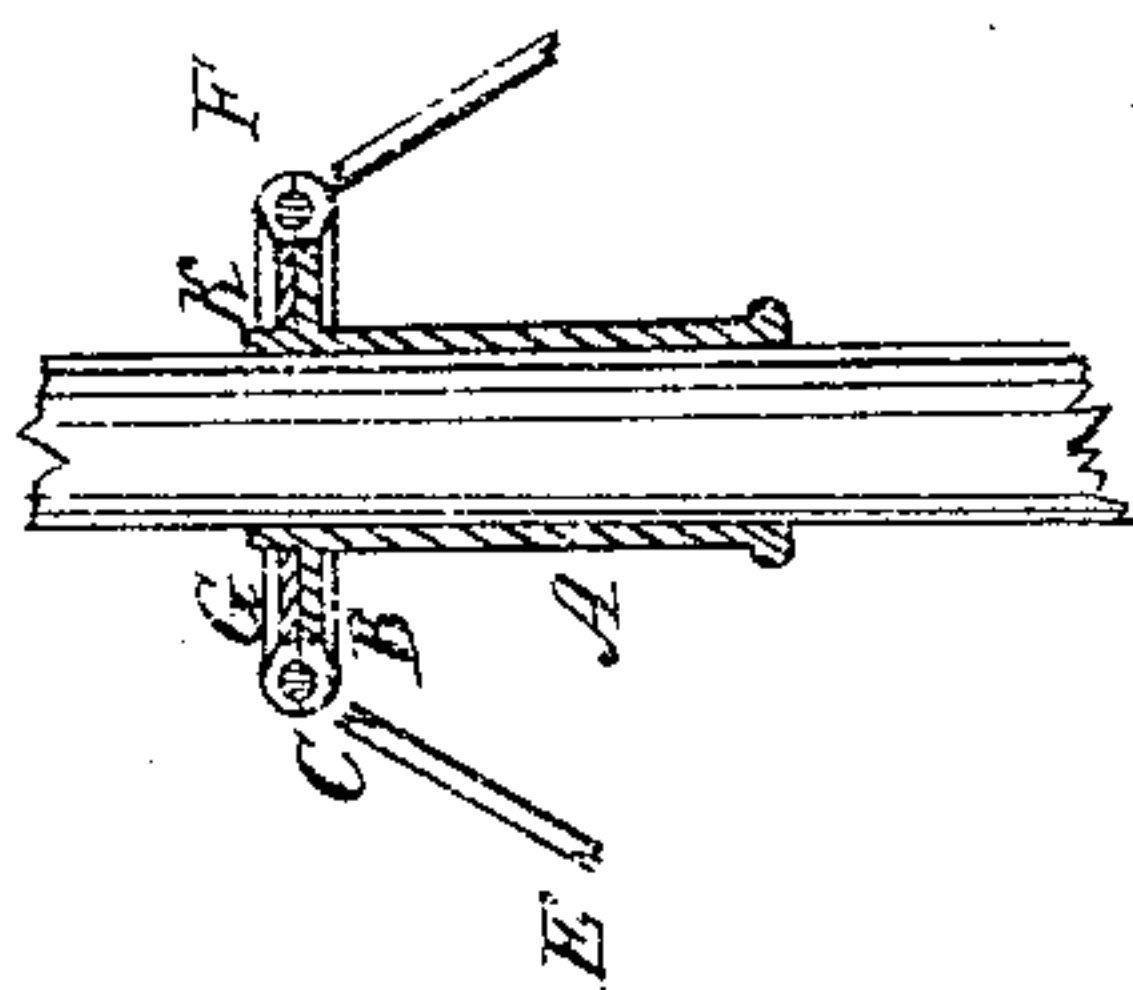


Fig. 5.

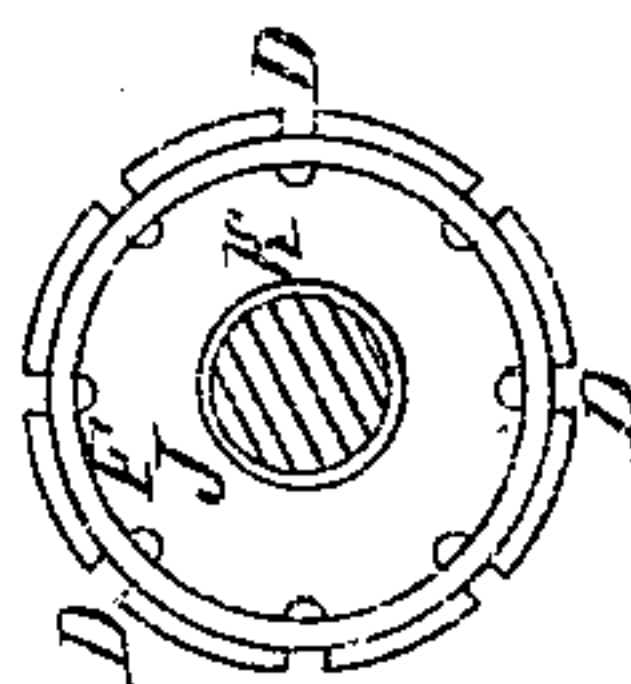


Fig. 2.

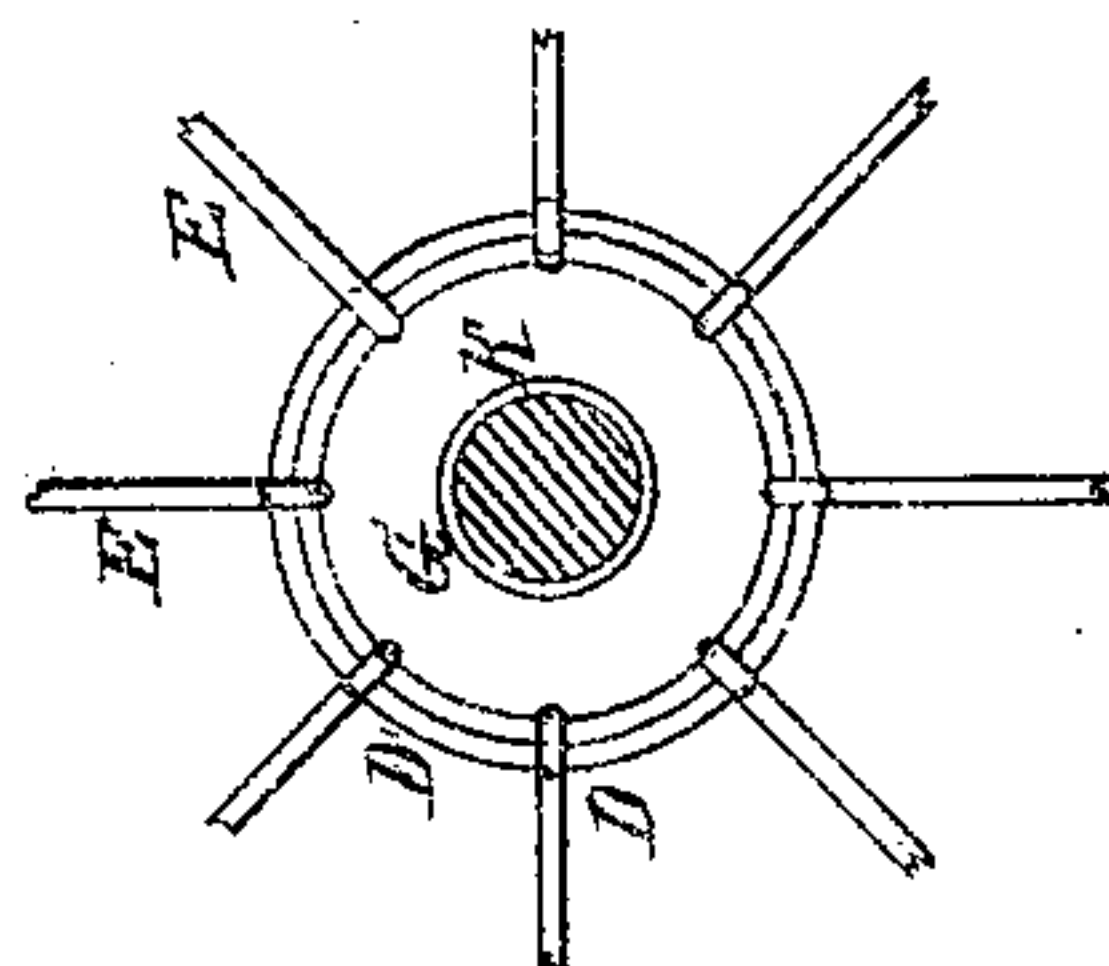


Fig. 1.

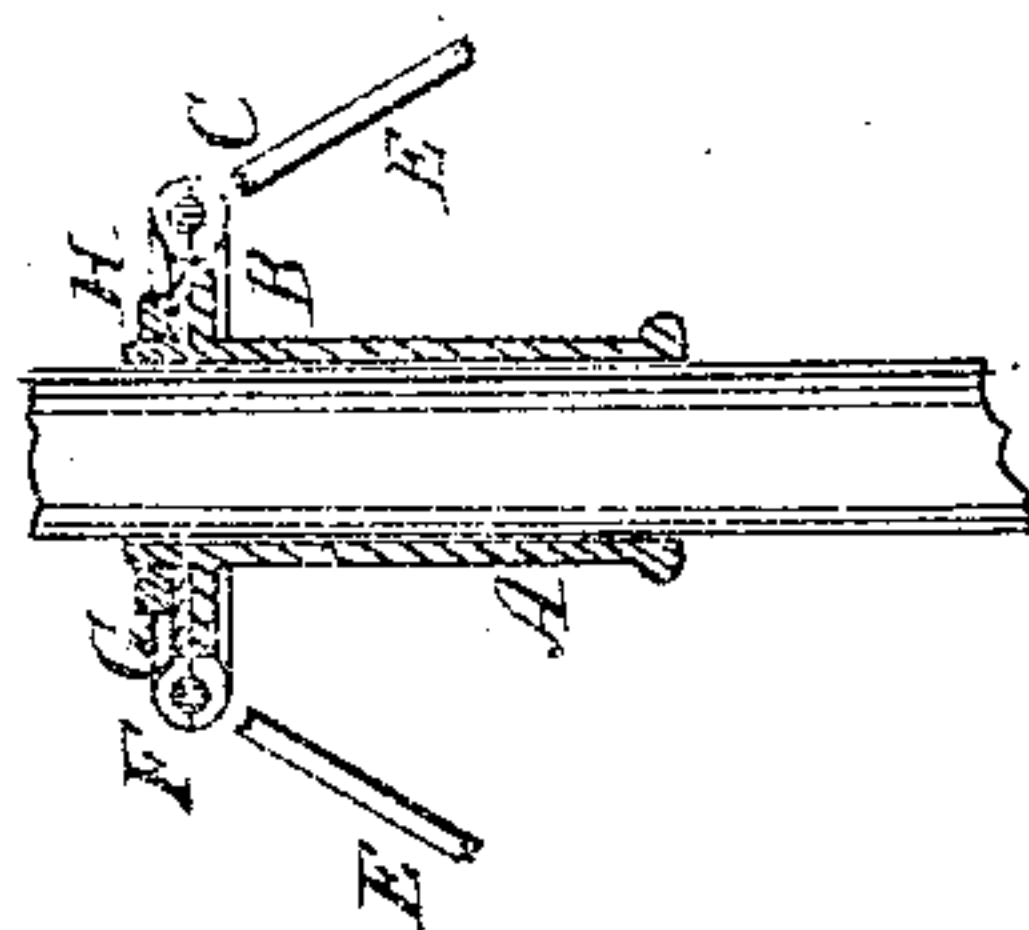


Fig. 4.



Witnesses:

J. P. Graham
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Inventor:

Charles O. Buell

United States Patent Office.

CHARLES O. BUELL, OF STAMFORD, CONNECTICUT.

Letters Patent No. 67,162, dated July 30, 1867.

IMPROVEMENT IN UMBRELLAS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES O. BUELL, of Stamford, in the county of Fairfield, in the State of Connecticut, have invented a new and useful Improvement in Umbrellas and Parasols; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 is an axial section of the runner of an umbrella, in which my improvement is seen.

Figure 2 is a top or end view of the runner.

Figure 3 is an axial section of the runner, to show how the washer can be held without a nut.

Figure 4 is an axial section of the crown-piece of an umbrella, in which my improvement is likewise shown.

Figure 5 is a top view thereof.

Similar letters of reference indicate corresponding parts.

This invention relates to umbrellas, parasols, sun-shades, and other articles of similar character.

The letter A, fig. 1, designates the runner of an umbrella, surrounded near its upper end by a flange, B, that is cast on or otherwise firmly fixed to said runner. The upper face of said flange is provided with a groove, C, near to and concentric with the circumference or outer edge of the flange, the outer edge of the flange being notched at equal distances apart by radial notches, D, which intersect or cross said groove, said notches being as numerous as the stretchers E, which they are intended to receive. F is a ring, which goes laterally through the lower ends of the stretchers, and after the stretchers are placed thereon, at the proper distances apart to coincide with the positions of the notches, the ring is laid in said groove C, the stretchers taking their places in their appropriate notches. I then cover the ring with a washer or annular plate, G, of about the same size as the flange B, said washer having on its under side a groove that coincides with and comes directly over the groove of said flange, its outer edge having notches that coincide in number and position with the notches of said flange. The depth of the grooves, taken together, is about equal to the diameter of the ring, so that the latter is enclosed and held securely between the flange and the washer, whose faces come in contact, or nearly so. The washer is held down by means of a nut, H, (see fig. 1,) screwed upon the upper end of the runner, which projects far enough beyond the flange and the washer for that purpose, and has a screw-thread cut on it to allow the nut to be secured thereto. The washer can be secured to the flange in any other convenient manner, as, for example, by bending over upon said washer the upper end or portions or divisions of the upper end of the runner, or by keying said washer to the runner; and as these methods are ordinary expedients, familiar to skillful mechanics, it is not necessary to give any further explanation thereof. This mode of making the runner, and of securing the ring and the stretchers thereto, gives increased strength to these parts of an umbrella, lessens the liability of injury to the ring or wire which goes through the eyes of the stretchers, and facilitates the repair of the ring or its removal when broken. It also improves the appearance of the runner. I apply the same principle of construction in making the crown-piece, which receives the upper ends of the ribs of an umbrella or other similar article. This is shown in figs. 4 and 5. The letter I designates the flange of the crown-piece, which is suitably secured to the upper part of the stick of an umbrella. The upper face of the flange I has a groove concentric with and near to its circumference or outer edge, and its outer edge is notched to receive the ribs, which are placed at suitable distances apart upon a ring or wire that is laid in said groove. A washer, J, whose outer edge is notched, and its under side grooved, to correspond respectively to the notches and groove of the said flange of the crown-piece, is laid upon the flange in such a way as to cover and enclose the said ring or wire, and to bring its notches in coincidence with the notches of the flange I, the construction and arrangement being similar to that employed in making the runner and in attaching the stretchers thereto. The cylindrical part K of the crown-piece can extend far enough above the washer J to enable a nut to be applied, as in the case of the runner shown in fig. 1, or to enable the edge of the part K to be turned down on said washer (after the manner of riveting work together) according to the modification shown in fig. 3, as well as in fig. 4, where the part K is seen as it appears before it is turned down or riveted upon the washer. The flanges and washers can be arranged in reverse order if desired, when the nut will be placed below the washer and flange. It is obvious that my improvement may be applied alike to the crown-piece or runner without departing from the invention.

I am aware that runners of umbrellas have been made of two tubes, arranged for the reception of the stretchers and ribs, and for the reception of the holding parts of the stretchers or ribs, as in the patent of F. V. Noette, dated August 9, 1864. This I do not claim; but what I do claim as new, and desire to secure by Letters Patent, is—

The combination, with the flange of the runner or crown-piece of an umbrella, of a washer, so arranged as to enclose between said flange and washer the rings or wires that hold the folding parts of the structure, substantially as described.

CHARLES O. BUELL.

Witnesses:

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