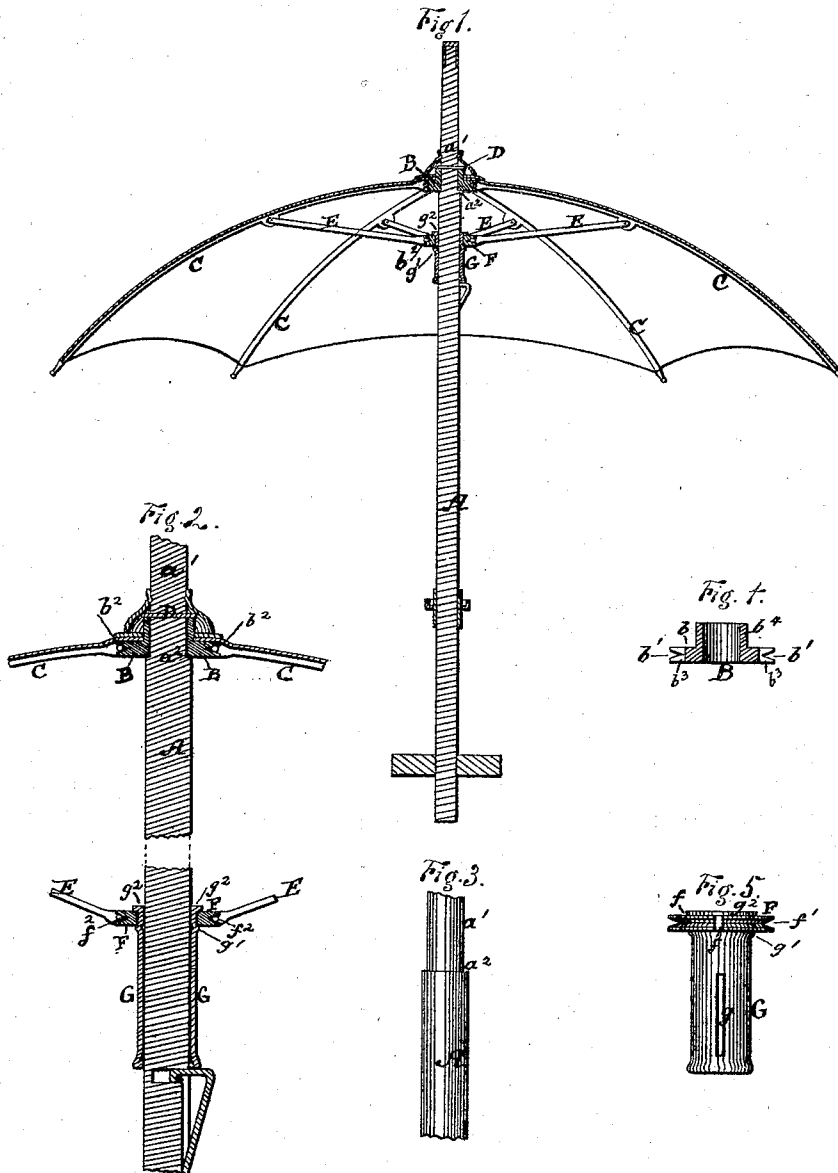


Revolving Umbrellas, &c.

No. 152,781.

Patented July 7, 1874.



Witnesses.
Chas. Horch
E. M. Brooks.

Inventor:
Daniel M. Wheeland
by Colborne Brooks
his attorney

UNITED STATES PATENT OFFICE

DANIEL M. VREELAND, OF NEW YORK, N. Y., ASSIGNOR TO ANDREW M. DAVIES, OF SAME PLACE.

IMPROVEMENT IN REVOLVING UMBRELLAS, &c.

Specification forming part of Letters Patent No. 152,781, dated July 7, 1874; application filed June 26, 1874.

CASE B.

To all whom it may concern:

Be it known that I, DANIEL M. VREELAND, of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Umbrellas, Parasols, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in that class of umbrellas, parasols, sun-shades, and other similar devices, in which the frames and their coverings are so arranged as to be capable of revolving around the stem or staff in the event of such frames or coverings colliding with fixed or passing objects, or when exposed to the action of heavy winds; and my invention consists, first, in improvements in the construction of the stem or staff and the frame-ring, and in the means of connecting the same together, whereby greater cheapness of the article produced is obtained, together with simplicity of construction and durability; secondly, my invention consists in the formation of a recess or channel in the runner, in which a revolving ring is arranged, to which the stretchers are connected; and, thirdly, my invention consists in the combination, in an umbrella or other similar device, of the said stem or staff, frame-ring, and runner, constructed as hereinafter fully described and set forth.

In the accompanying drawings, Figure 1 represents a sectional view of an umbrella with my improvements applied thereto. Fig. 2 is a section, showing the main parts on a larger scale. Fig. 3 is a detached view of the upper part of the stem or staff. Fig. 4 shows a detached sectional view of the ring B, and Fig. 5 is an external view of the runner G and ring F.

In each of the views similar letters are employed to indicate corresponding parts wherever they occur.

A is the staff or stem of the umbrella, parasol, &c., the upper end of which is turned down, so as to form a recessed or reduced portion, *a*, and a shoulder, *a'*, against which the ring B, to which the ribs C are connected, rests. D is a pin passed through the staff or stem A, which, together with the shoulder *a'*, forms the bearings for retaining the ring B in position, and against which it revolves. The ring B on its lower part is formed with an enlargement, *b*, in which is constructed a groove or channel, *b'*, for the reception of a wire, *b''*. It is also formed with a series of recesses, *b'''*, for the reception of the ends of ribs C, which are retained in position in the usual manner by the passage of the wire *b''* through holes in their ends. Above the enlargement *b* an annular projection, *b''''*, is formed, which serves as a bearing, which rests against the pin D. E are the stretchers, which, at their upper ends, are connected to the ribs in the usual manner, while at their lower ends they are connected to a ring, F, formed with recesses *f*, for the reception of the ends of the stretchers E, and a groove or channel, *f'*, for a wire, *f''*, which passes round the ring F, and through the ends of the stretchers, for the purpose of holding the same in position. G is the runner, which at its lower part is formed with the ordinary slot *g* therein for the passage of the usual retaining-spring, while at its upper end it is formed with bearings *g'* *g''*, between which the ring F revolves.

By this construction and arrangement it will be seen that I am enabled to produce an umbrella, parasol, or other similar device with a revolving frame and covering at a much less cost than heretofore, and at the same time the frame and covering are capable of revolving at all times with great facility.

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

1. In an umbrella, parasol, or other similar device, in combination with a stem or shaft, A, provided with a recessed or reduced portion, *a*, a shoulder, *a'*, and a pin, D, a ring, B, formed with a projection, *b*, channel *b'*, re-

cesses b^3 , and an annular projection, b^4 , all constructed and arranged to operate substantially as described.

2. The stem A, constructed with a recessed or reduced portion, a' , shoulder a'' , and a pin, D, ring B, and ribs C, in combination with the runner G, ring F, and stretchers E, the whole being constructed and arranged to operate substantially as described.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

DANIEL M. VREELAND.

Witnesses:

CHAS. T. BRUEN,
JOHN M. HARRINGTON.