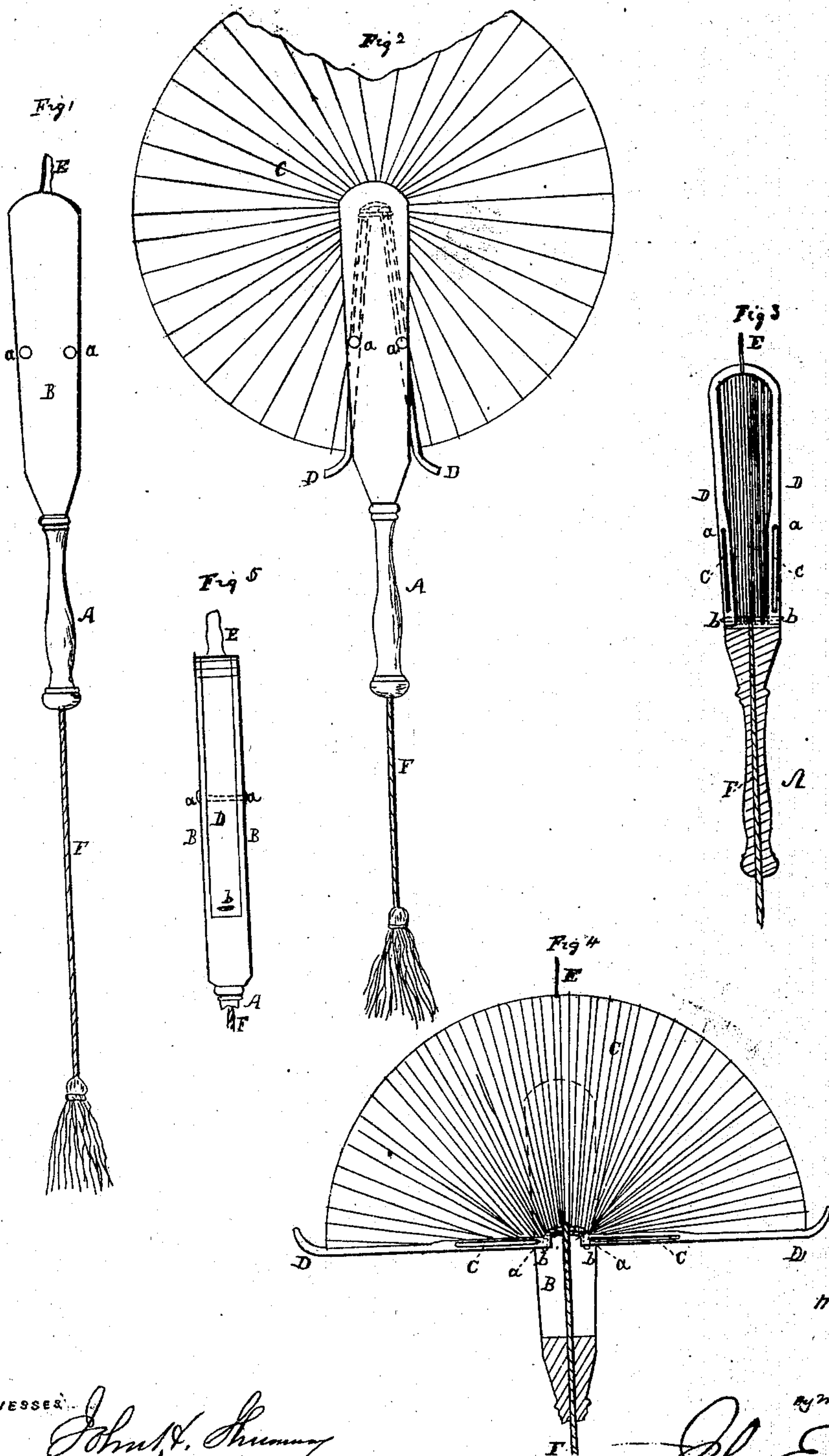


# W. Lucas, Fan.

No. 68890.

Patented Sep. 17. 1867



W. Lucas

INVENTOR

By Jno. Attorney,

WITNESSES

John H. Shumway  
a. j. Tibbitts

J. E. Earle



# United States Patent Office.

WILLIAM LUCAS, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO OLIVER DOWNING, OF THE SAME PLACE.

*Letters Patent No. 68,890, dated September 17, 1867.*

## IMPROVEMENT IN FANS.

*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, WILLIAM LUCAS, of New Haven, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Fans; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference, marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view closed.

Figure 2, the same view open.

Figures 3 and 4, sectional views to illustrate its operation; and in

Figure 5 an edge view.

This invention relates to an improvement in that class of fans which are formed by folding so as to be opened and closed, and consists in the peculiar construction and arrangement for opening and closing.

To enable others to construct my improvement I will proceed to describe the same as illustrated in the accompanying drawings.

A is the handle. B B are two plates fixed to the handle, the space between being equal to the width of the folds of the fan C. Between the said plates, at *a*, are pivoted two edges, D, formed so that when the fan is closed, as seen in fig. 3, the said edges close the space between the two plates. Between these two plates the paper or other material, folded in the usual manner for circular fans, is placed, and secured at the lower ends at *b*, as seen in figs. 3 and 4, and in the said edges D are formed slots *c*, so that the edges D may be drawn up on the said slots. To the fan itself, at the centre, is fixed a piece of ribbon, E, or other device, projecting up through between the ends of the two edges D, as seen in fig. 3, and through the handle is passed a cord, F, fixed to the lower end of the fan, as also seen in fig. 3. This completes the construction of my improvement.

Its operation is as follows: Taking the handle in one hand, with the other hand take hold of the ribbon E and draw upward, the slots *c* permitting the two edges to rise until their lower end arrives at the pivot *a*. These being held and still drawn upon, the fan opens as seen in fig. 4, the two edges D falling downward until the slots ascend inverted upon the pivots to the position as seen in fig. 2, which leaves the fan open and ready for use. This operation has drawn the cord F up, as from the position in fig. 1 to that in fig. 2. To return or close the fan, draw the cord downward; the edges D return and are folded to their first position. Thus is formed a fan protected when folded by its own case, and simple and cheap in its construction.

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

The two edges D, slotted and pivoted between the plates B, and arranged so as to operate substantially in the manner herein set forth.

WILLIAM LUCAS.

Witnesses:

A. J. TIBBITS,

JOHN H. SHUMWAY.