O. Bruck.

Fan.

No. 70,952. Patented Nov. 19. 1867.

Fig. 2.

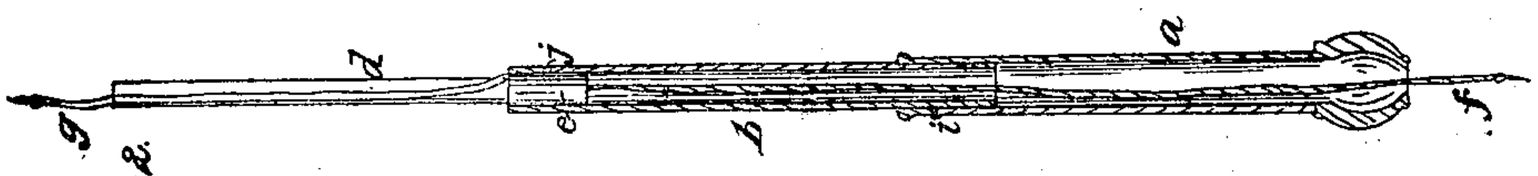


Fig. 3.

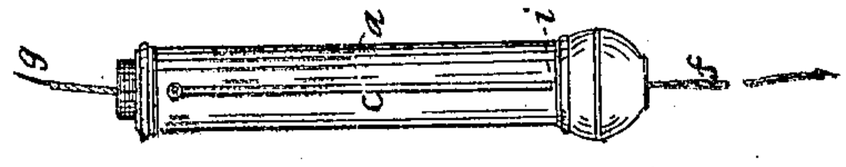
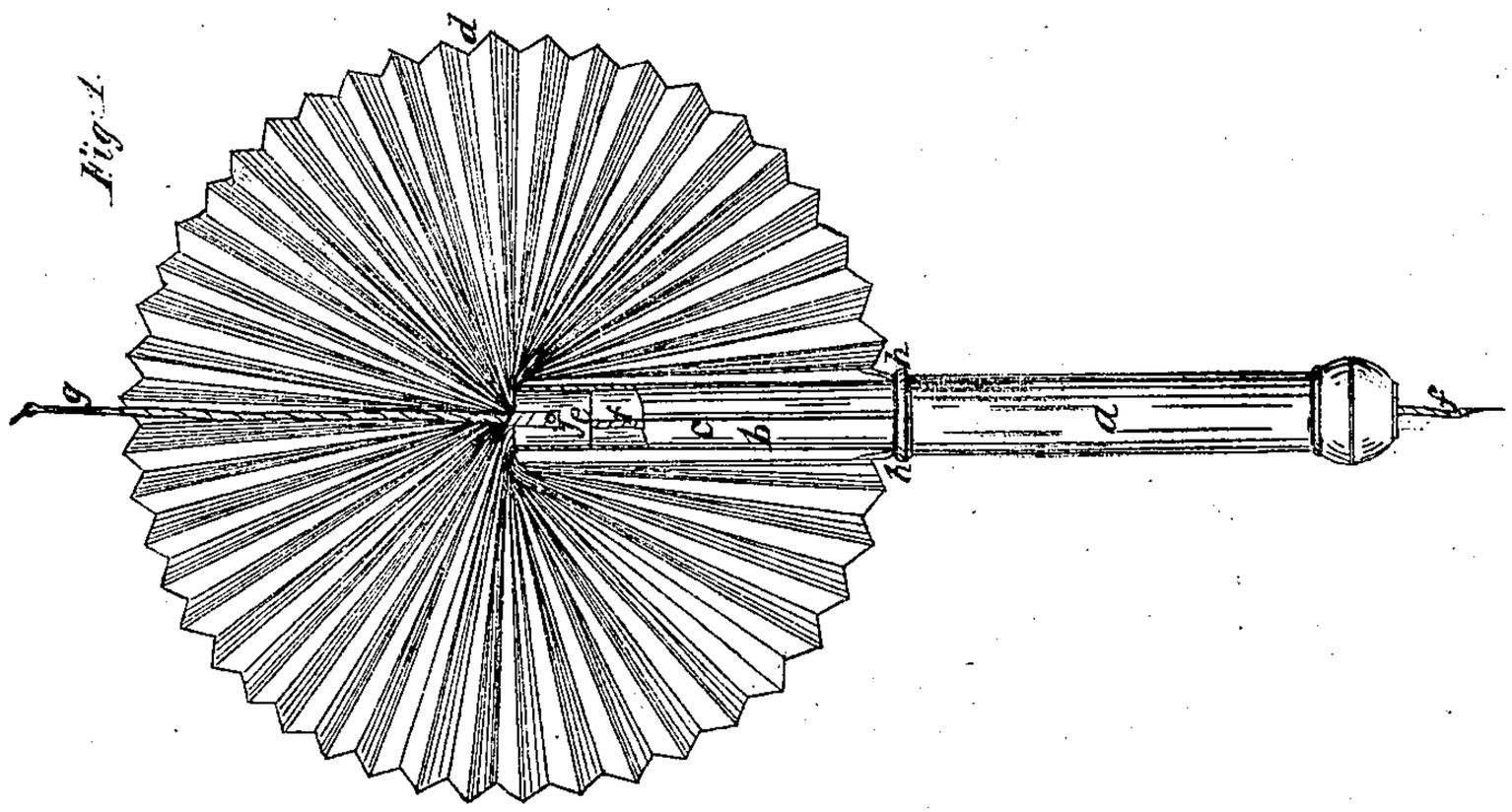


Fig. 1.



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United States Patent Office.

OTTO BRÜCK, OF NEW YORK, N. Y.

Letters Patent No. 70,952, *dated November* 19. 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, OTTO BRÜCK, of No. 17½ Eldridge street, New York, in the county and State of New York, have invented a new and useful Improvement in Fans; 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 elevation of the fan extended and expanded.

Figure 2 is a central section thereof.

Figure 3 represents the fan closed up and concealed in the outer case.

Similar letters indicate corresponding parts.

This invention consists in a fan of novel construction, which can be worn and used by itself, or be combined with other articles of personal use, as, for example, with a card-case, or a pocket-book, or a parasol, or, in general terms, with any article which is not too bulky or too heavy to be conveniently handled. In this example I have shown my fan in a separate state, in which condition it can be worn and used without connecting it with any other article. Its connection or combination with other articles is accomplished by attaching the outer case of the fan to such an article in any convenient manner.

The letter *a* designates a tubular case, which encloses the fan when in a shut-up condition, and which, when the fan is not combined with other articles, forms the handle by which it is held and used. The letter *b* designates a secondary tubular case, which receives the leaves of the fan into itself when the fan is shut up, and which is so made and arranged as to slide in and out of case *a*, in closing or opening the fan. The leaves *d* of the fan are, in this example, so made and arranged as to assume a circular shape when fully expanded, but any other shape may be adopted to suit the taste or judgment of the maker. The depth of the folds of the several leaves is a little less than the diameter of the secondary or extension-case *b*, so as to allow said case to receive the leaves without destroying their shape. The extension and expansion of the fan, and its closure, are accomplished by means of cords *f g* attached to a movable head, *e*, which holds the central extremities of the leaves of the fan, and is free to slide up and down in case *b*.

In fig. 1 the upper end of case *b* is partly broken away, in order to show said head *e* with distinctness.

The fan can be extended and expanded, and also closed, by means of pins projecting through the cases *a b*, as shown in the drawing. In this example I have shown such pins *i j*, which project, respectively, from the sliding extension-case *b* and the movable head *e*, so that they can be operated by hand. The pin *i* of sliding case *b* projects through a longitudinal slot, *c*, made in the side of the outer case *a*, the ends of the slot serving as stops to arrest the pin when the inner case has been moved in or out the proper distance. The pin *j* in the same way furnishes facilities for operating the fan, by pushing it out or drawing it into case *b*, the pin working in a like longitudinal slot *c* in case *b*. The ends of said slot serve to limit the movements of the head.

The side folds or leaves of the fan, when the fan is extended, are separated by the case *b*, along the sides of which they extend down to the upper end of case *a*, to which they are fastened at *h h*, as shown in fig. 1. When the fan is shut, the said side folds are made to take their places along the inner side of case *b*.

The operation of the fan is as follows: To extend and expand it from the condition seen in fig. 3, one pulls the cord *g* and draws out the sliding case *b* to the extent allowed by the pin *i* and slot *c*, the fan meanwhile being drawn out of the inner case, because the ends of its side folds are fastened to the outer case at *h h*. When the case *b* has become fully extended, the fan is also fully expanded. In closing the fan, one pulls the cord *f*, and draws the case *b* within case *a*, into which the case *b* slides easily, and when pin *i* has reached the bottom of the slot *c* of case *a*, the pull on cord *f* begins to draw the head *e* downwards, and thereby to return the folds or leaves of the fan into its sheath or case, in which it is fully gathered when pin *j* has reached the bottom of the slot *c* of case *b*.

The size of the fan can be varied, to suit the maker, from the size of a common pencil-case to the size of ordinary fans, and the cases may be of any suitable material—metallic, wooden, or mineral. The leaves of the fan are flexible, to allow them to be turned into and out of case *b*.

I am aware that a fan has been manufactured in Meissen, Saxony, which, when drawn in, is entirely shut up in its own case. Said fan, however, is composed of a single tube, into which the fan can be drawn, and, in order

to obtain a fan of proper dimensions, the tube must necessarily be made of such a length that it is not very convenient to carry. By my telescope arrangement the size of the whole device, when shut up, is reduced one-half, and a fan is obtained which can be conveniently carried in the pocket.

What I claim as new, and desire to secure by Letters Patent, is—

The tubular handle *a*, into which slides the tube *b*, which is adapted to receive the fan *d* in its folded state, in combination with the tube *b*, head *e*, fan *d*, and draw-strings *f* and *g*, the whole arranged and combined substantially as herein set forth.

OTTO BRÜCK.

Witnesses:
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