

C. C. E. SCHWARTZ.

Paper-Fan.

No. 163,266.

Patented May 11, 1875.

Fig. 1.

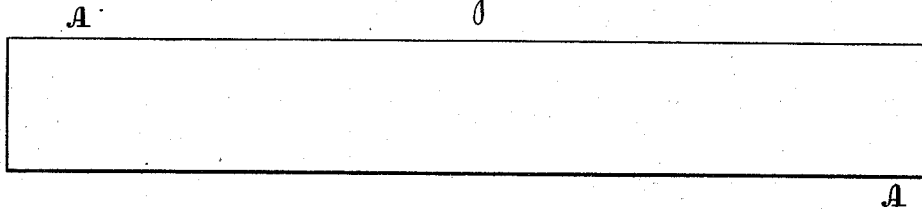


Fig. 2.

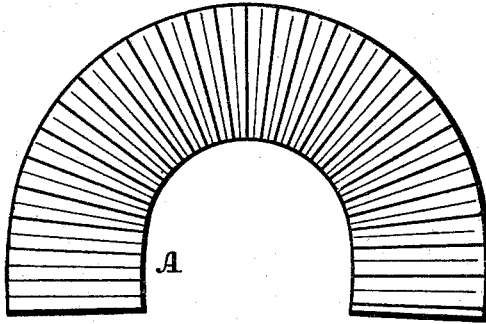


Fig. 3.



Fig. 4.

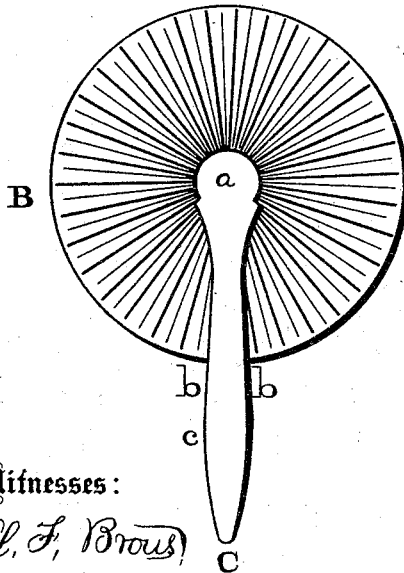
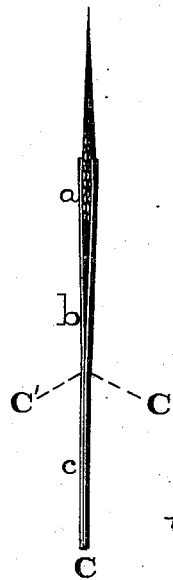


Fig. 5.



Witnesses:

L. F. Brous
No. P. Grant.

Inventor:

Chas. C. E. Schwartz
by *Johann Diederichsen*
att'y.

UNITED STATES PATENT OFFICE.

CHARLES C. E. SCHWARTZ, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PAPER FANS.

Specification forming part of Letters Patent No. **163,266**, dated May 11, 1875; application filed January 8, 1875.

To all whom it may concern:

Be it known that I, CHAS. C. E. SCHWARTZ, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Paper Fans; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a face view of the blank from which the body of the fan is constructed. Fig. 2 is a face view, and Fig. 3 a side view, showing successive operations. Fig. 4 is a face view of the fan. Fig. 5 is a side-edge view thereof.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists in forming the body of the fan of a fluted circular disk, which is constructed of a strip of paper of quadrilateral form, crimped or fluted, and united at its ends, in combination with a handle made of two strips of pasteboard, which are secured at one end to the center and sides of the circular disk or body of the fan—at the other end to each other.

Referring to the drawings, A represents a strip of paper, which is of quadrilateral form, and constitutes the blank of which the fan is made. This strip A is subjected to a crimping or fluting apparatus, the result of which is the semicircular piece shown in Fig. 2. I now unite the ends of the crimped strip A, and produce the truncated cone of Fig. 3, the center of which is then depressed, whereby I form a flat, crimped, or fluted disk, B, which will constitute the body of the fan. C represents the handle of the fan, the same being constructed of two strips, C' C', of card or pasteboard. These two strips are arranged and secured coincident on each side of the

body of the fan from center *a* to circumference *b*, and extend beyond the circumference, so as to form a grasping-surface, *c*, the portions of the strips constituting which being likewise secured together.

It will thus be seen that the body of the fan cannot open or resume the conical shape shown in Fig. 3, owing to the embrace of the strips of the handle at the center of said body. It will also be seen that the center of the body B is equal in thickness to the depth of the flutes, the latter preferably decreasing as they approach the circumference *b* of the disk, whereby the center of the body causes the latter to be greatly strengthened at said center, which, being connected to the handle, is the point liable to bend or break.

The circumference *b* of the body is stretched or taut, the result of flattening the cone, Fig. 3, and thus said circumference or outer edge is strong. Moreover, the strips C', embracing the body B from center to circumference, stiffen said body, and it will be found that with all the other features presented the body, though made of paper, and light, possesses considerable strength, will render appreciable service, and can be produced at a very small expense.

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

As a new article of manufacture, the paper fan herein shown and described, the same consisting of the circular fluted disk B, formed of a flattened truncated cone constructed of a quadrilateral piece of paper, crimped and united at its ends, in combination with the handle C, consisting of two strips, C', of pasteboard, secured to each other and to the disk, all as set forth.

CH. C. E. SCHWARTZ.

Witnesses:

JOHN A. WIEDERSHEIM,
ALBERT H. HOECKLEY.