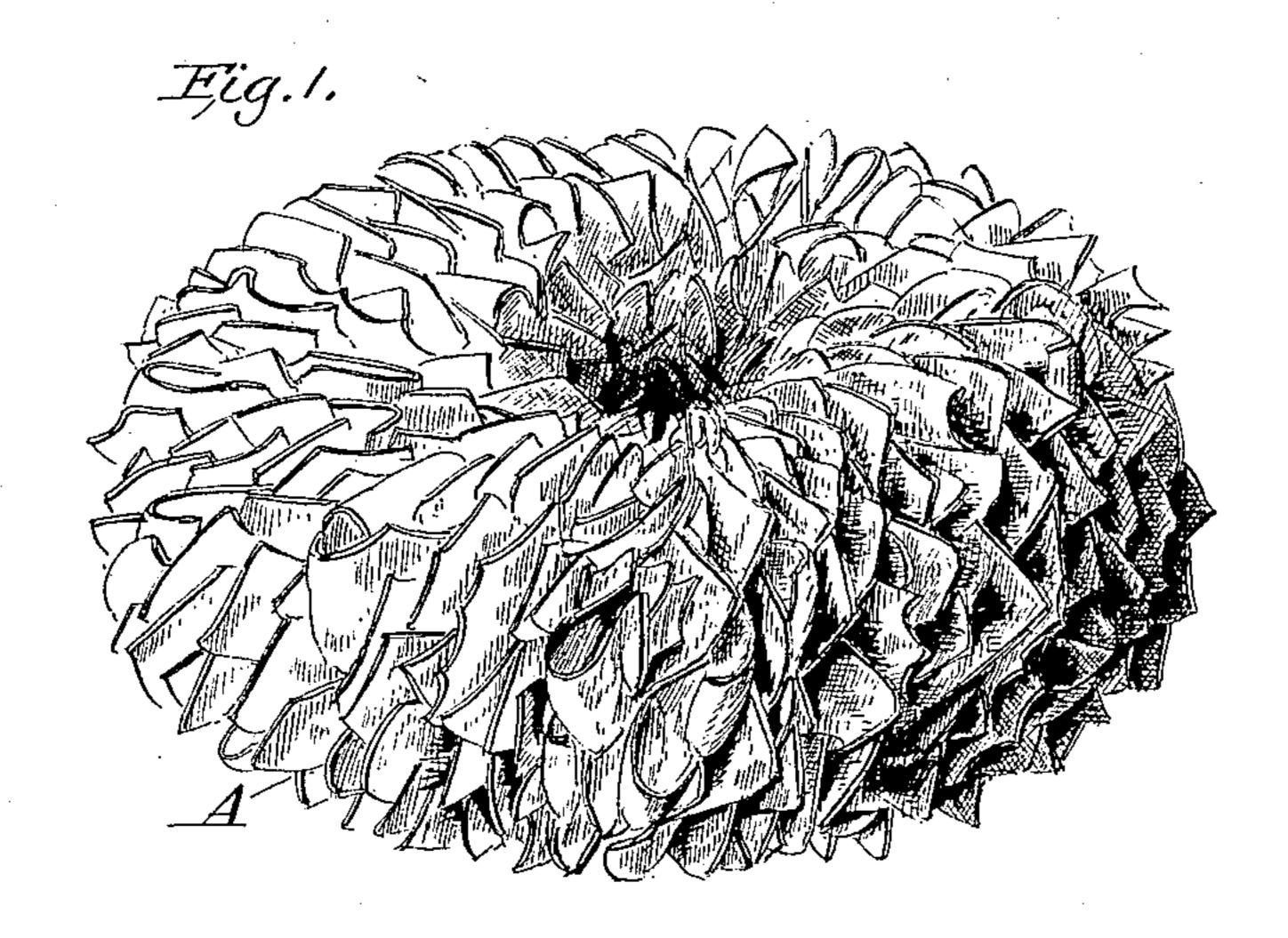
(No Model.)

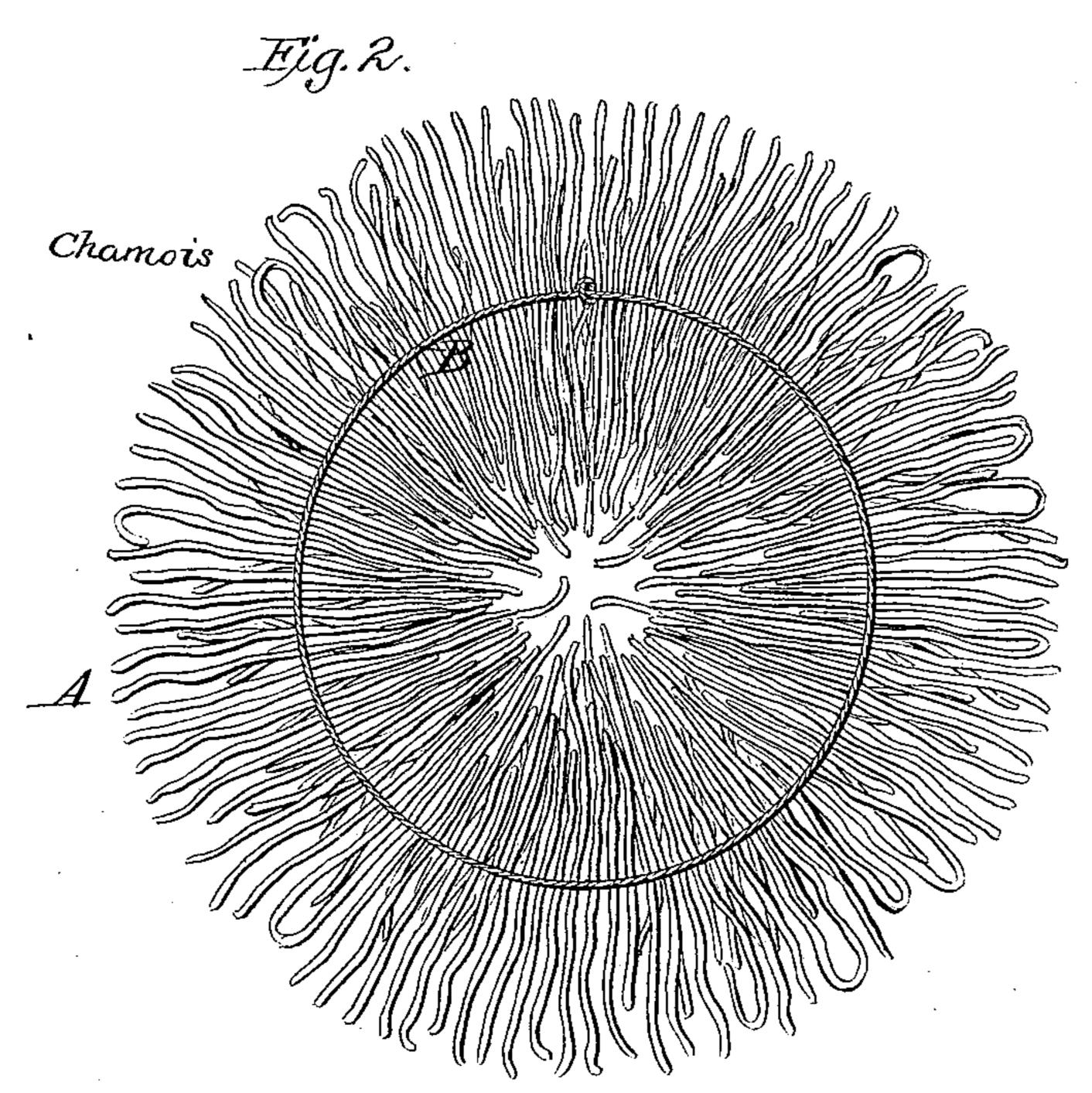
E. E. THORPE.

WINDOW CLEANER.

No. 390,723.

Patented Oct. 9, 1888.





Witnesses:

James F. Duttamel. Horace A. Dodge. Inventor:

Idward O. Thorpe, by Dodger Sone, Attys.

UNITED STATES PATENT OFFICE.

EDWARD E. THORPE, OF NEW YORK, N. Y., ASSIGNOR OF ONE HALF TO HARRY ROBINSON, OF SAME PLACE.

WINDOW-CLEANER.

SPECIFICATION forming part of Letters Patent No. 390,723, dated October 9, 1888.

Application filed March 10, 1888. Serial No. 266,837. (No model.)

To all whom it may concern:

Be it known that I, EDWARD E. THORPE, of New York, in the county of New York and State of New York, have invented certain new 5 and useful Improvements in Window-Cleaners, of which the following is a specification.

My invention relates to window-cleaners; and it consists of a window-cleaner composed of pieces of chamois-skin or equivalent mateto rial strung upon an endless band.

In the drawings, Figure 1 is a perspective view of my improved cleaner, and Fig. 2 a sectional view of the same.

In the manufacture of sachets—such, for in-15 stance, as are shown in Letters Patent No. 361,098, issued to me April 12, 1887—I find that a great amount of chamois-skin is left over, and, owing to the irregular shape of the waste pieces, has not heretofore been utilized, but 20 thrown away. Of course in the manufacture of other articles of this material a correspond. ing waste also occurs, which in the aggregate amounts to considerable.

The object of my invention, therefore, is to 25 obviate this waste of material and to produce a window-cleaner as a new article of manufacture which will subserve the purposes for which it is designed and which will at the same time be cheap and simple in its construction.

30 A indicates the body of the cleaner, which STEWART NEWELL.

comprises a number of pieces of chamois skin of any desired form, and which, as shown in Fig. 2, are strung upon an endless band, B, of wire or cord.

The pieces of chamois skin, although they 35 may be of irregular forms or shapes, are, previous to being strung upon the band, preferably folded so that they will all project equally on opposite sides of the band and present a uniform and regular appearance.

The cleaner when in use is held in the hands, and as one surface becomes moist the pieces of chamois-skin are turned upon the band, so as to present a new dry surface.

If desired, the pieces comprising the body A 45 may be cut or stamped out in the form of disks or any other desired shape or form.

Having thus described my invention, what I claim is—

As an improved article of manufacture, a 50 window-cleaner composed of pieces of chamoisskin or equivalent material strung upon an endless band.

In witness whereof I hereunto set my hand in the presence of two witnesses.

EDWARD E. THORPE.

Witnesses:

GEO. H. M. CARBIN,