(No Model.)

E. K. WARREN.

METHOD OF ATTACHING STIFFENINGS TO DRESS WAISTS.

No. 327,626. Patented Oct. 6, 1885.

Fig. 1.

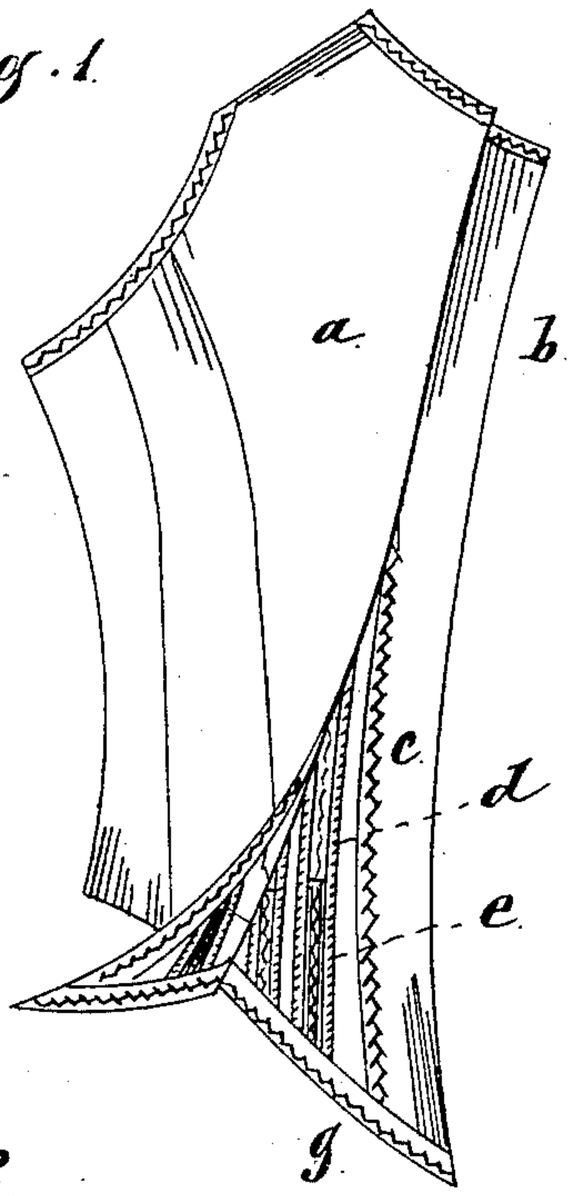

Fig. 2.

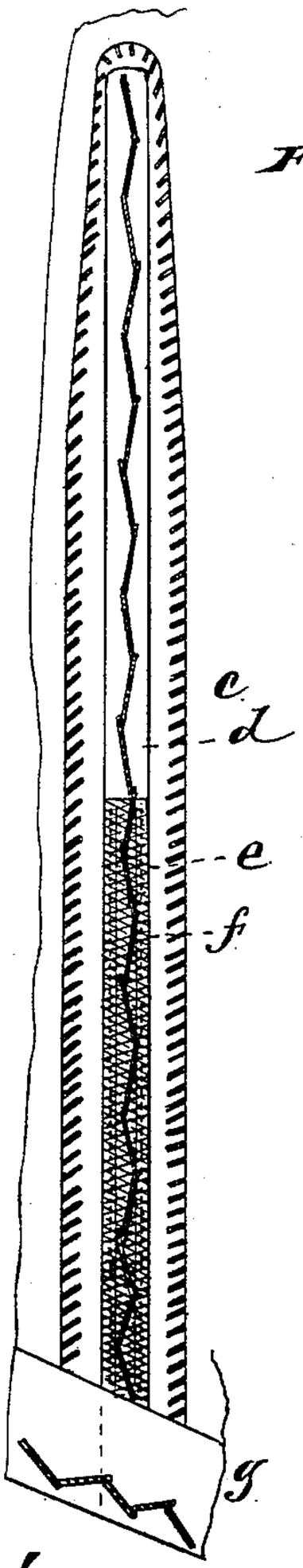

Fig. 3.

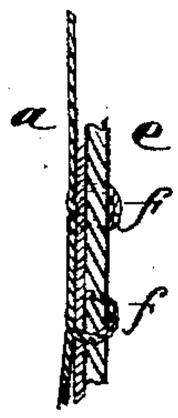

Fig. 4.

Witnesses:
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UNITED STATES PATENT OFFICE.

EDWARD K. WARREN, OF THREE OAKS, MICHIGAN.

METHOD OF ATTACHING STIFFENINGS TO DRESS-WAISTS.

SPECIFICATION forming part of Letters Patent No. 327,626, dated October 6, 1885.

Application filed March 7, 1885. Serial No. 158,103. (No model.)

To all whom it may concern:

Be it known that I, EDWARD K. WARREN, residing at Three Oaks, in the county of Berrien and State of Michigan, and a citizen of the United States, have invented certain new and useful Improvements in Methods of Attaching Stiffenings to Dress-Waists, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a view showing the front half of a dress-waist and part of the back; Fig. 2, a plan view of one of the stiffened seams, full size; Fig. 3, a broken longitudinal central section, and Fig. 4 a cross section, of the open seam.

The object of this invention is to provide the seams of a dress-waist with a stiffening material connected with the seams of the dress fabric or outside material and the lining without the formation of separate pockets, and to avoid the end pressure and wrinkling of the stiffening material, when such stiffening is held or fastened only at its ends; and its nature consists in the improvements hereinafter described and claimed as new.

In the drawings, *a* indicates the front portion, and *b* the back portion, of one-half of a dress-waist; *c*, the edges of the dress fabric; *d*, covered stiffening material; *e*, stiffening material with the covering removed; *f*, line of stitches for attaching stiffening material to the seam; *g*, facing.

The dress-waist is cut and the seams are sewed together in the usual manner. The edges of the fabric and lining which project inward may be overcast, as shown in Fig. 2, notched, as shown in Fig. 1, or they may be left plain. They are then spread, as shown in Fig. 4, and the stiffening material laid in the open seam, as there shown. It is then feather-stitched, or is given a zigzag line of stitching, as shown in Fig. 2.

It will be seen from the uncovered portion of the stiffening that it is made of a flat band of material which is composed of four strands wound together. This line of stitching passes over the two middle strands, and between the two outer ones down through the inward-projecting parts of the same, alternating on each side of the main or outer seam, so that the stiffening material is firmly connected to the inward-projecting parts of the same without in any manner affecting the principal seam of the fabric, and yet supporting the fabric as firmly as though it were directly connected therewith.

By this arrangement all wrinkling of the waist is avoided, also all tendency of the stiffening material to cut through at the ends, and yet it is always in contact with the seam, so as to support it in all points and in all positions, and allow it easily to conform to the body and its movements.

The stiffening material preferred is made of what I call "featherbone," which is formed by first winding the fiber of the quill part of feathers into small round strands, then winding three or more into a single flat strand, which produces a stiffening material which is sufficiently rigid to maintain its position, but flexible in use and of easy conformation to the body.

It is not essential that the stitching *f* should be zigzag, as it may be in two straight lines, without crossing the middle strand of the stiffening material or blade *e*.

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

The method of attaching the stiffening material to seams by placing it in the open seam after the main seam is sewed, and attaching it to the fabric by stitching its sides to the inside portion of the open seam without connecting it with the main seam, substantially as described.

EDWARD K. WARREN.

Witnesses:

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HARRY T. JONES.