(No Model.)

G. A. DODGE.

DRESS STIFFENER.

No. 584,334. Patented June 15, 1897.

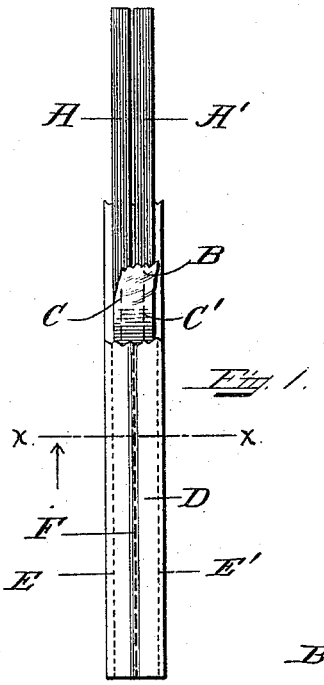

Fig. 1.

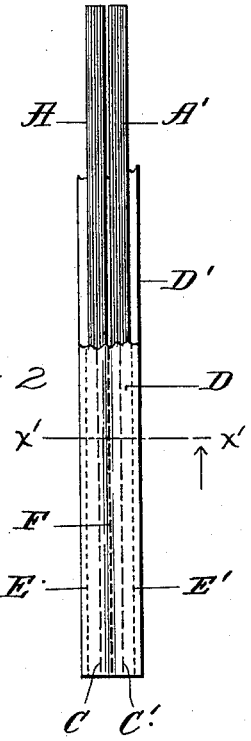

Fig. 2.

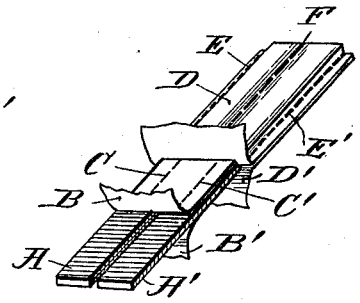

Fig. 5.

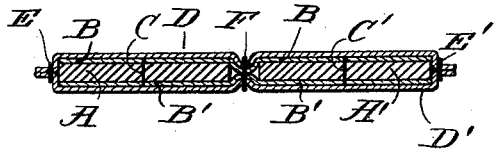

Fig. 3.

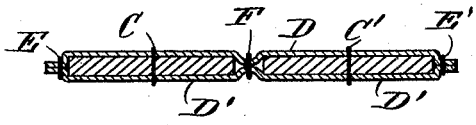

Fig. 4.

Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE A. DODGE, OF WAKEFIELD, MASSACHUSETTS.

DRESS-STIFFENER.

SPECIFICATION forming part of Letters Patent No. 584,334, dated June 15, 1897.

Application filed January 7, 1897. Serial No. 618,222. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. DODGE, of Wakefield, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Stays, of which the following is a specification.

In fine dressmaking, in order to get the best results, the dressmaker soaks the whalebone in water for a sufficient time to soften it and thus enable her to sew through it and attach it directly to the dress and better enable her to shape it and maintain the shape of the dress, as the whalebone itself, being stitched directly to the dress, remains where it is first placed; but even in the best work the bone, being put into the dress when wet and soft, will in drying shrink and lose part of that shape which it is the object of the dressmaker to produce; and, further, this manner of putting in whalebone is troublesome and takes time, as the bone must be put in carefully by hand, so that many dressmakers use as a substitute for the real whalebone an article which can be sewed through and attached directly to the dress.

Where whalebone is inclosed in pockets previously stitched to the dress, it is apt in a short time to slip and loosen, changing its position, so that the dress loses its shape because the bone is not stitched directly to the dress, and therefore does not remain in the exact position it originally occupied. It is this liability to slip and lose its original position that causes the dressmaker to soak the bone, so that she may sew through it and thus attach it directly to the dress for the finest grades of dressmaking, where time and expense are not considered.

The object of this invention is to produce for the consumer or dressmaker a finished dress-stay made of the real whalebone, which can be directly stitched to the dress without any preparation, thus saving the time and trouble it now takes to put real whalebone into the dress, as above described, and also avoid the loss of shape which is liable to occur when the whalebone is put into the dress soft and wet and then becomes dry and shrinks.

This finished garment-stay is composed of two strips of real whalebone inclosed in a tight cover, to which they are firmly secured by stitching, so that they form practically one integral piece and cannot slip or move away from one another. Consequently when such stay is put into the dress it remains where it is placed and also holds the dress in shape.

This stay when finished can be attached directly to the dress-waist or other part of the garment by hand or on the machine without the provision of a separate pocket on each seam in the garment, as is now the practice, to receive the uncovered whalebone of the usual width of a dress-stay.

In the accompanying drawings, Figure 1 represents a longitudinal view of a piece of dress or garment stay with the cover broken away to show two strips of whalebone. Fig. 2 is a similar view to Fig. 1, but showing the cover composed of only two pieces, one above and one below. Fig. 3 is a greatly-enlarged cross-sectional view through Fig. 1 on the line X X. Fig. 4 is a greatly-enlarged cross-sectional view through Fig. 2 on the line X′ X′. Fig. 5 is an enlarged detail perspective view of one end of the construction of Fig. 1, partly broken away to clearly show the construction.

Like letters of reference refer to like parts throughout the views.

The dress-stay, as shown in Fig. 1, is composed of two pieces of real whalebone A A′, over and under which is placed a layer of cloth B B′, and the cloth and bone are firmly secured together by the rows of stitching C C′, which pass through the bone and both layers of cloth. Over and under the cloth pieces B B′ are arranged cloth or silk pieces D D′ of greater width than the bone and linings B B′. These two outer layers of cloth are firmly secured together on the opposite edges by rows of stitching E E′, and the row of stitching F passes through the cloth pieces B B′ D D′ and between the two pieces of whalebone A A′, thus firmly securing the covers B B′ D D′ together and holding the whalebone strips A A′ tightly in their places, but leaving a place between the same by which the stay may be sewed directly to the dress by the dressmaker, either by hand or on the machine. This middle row of stitching not only secures the covers together and holds the two strips of whalebone in their proper positions, but serves as

a guide to the dressmaker to indicate where the stitching is to be done in order to attach the stay to the dress.

The construction shown in Figs. 2 and 4 is practically the same as that shown in Fig. 1, excepting that there is only one lower layer of cloth D D′, and the stitching is the same as described in Fig. 1, two rows of stitching C C′ passing through the bone and cover, two rows of stitching E E′ on the opposite edges of the bones, and one row of stitching F between the bones. This stay when finished shows five rows of stitching, and for that reason may be somewhat objectionable on the market, and therefore the construction shown in Fig. 1, showing only three rows of stitching, is preferable, as it has a better appearance.

The construction of this stay, as shown in Fig. 1, is as follows: Whalebone of the usual width of a dress-stay is split lengthwise through the center, soaked in water, and steamed until it is of the right consistency, when it is taken to a double-needle machine—one needle for each strip of whalebone. This machine is arranged with suitable guides and gages to carry each whalebone strip A A′, so that it will be sewed directly through the center, one gage carrying the bottom lining B′ and the other gage carrying the top lining B, so that in the operation of the machine the stitching passes through both linings B B′ and the whalebone strips A A′, leaving a space between the two bones. After this step, in order to obtain the best results, the bone is allowed to thoroughly dry and shrink to its normal shape on the reel on which it has been wound, and then is taken to another two-needle machine gaged to sew on the outside of the two whalebone strips. There are provided on this machine guides and gages to carry the prepared bone and the top and bottom layers of cloth D D′, and the needles are gaged so that the rows of stitching E E′ draw the top and bottom layers tightly over the bone. After this step the stay so prepared is passed through another machine, having a guide to carry the stay, so that it will be stitched directly down through the center between the two whalebone strips. This last row of stitching serves to additionally tighten the stay and at the same time maintain a positive space between the bones for the operator to sew through the stay between the bones in putting the stay into the dress.

In the construction shown in Fig. 2 the layers D D′ go through the first step—that is, being directly stitched to the whalebone strips—as well as the succeeding steps, as above described. Briefly, the bone is first softened to enable it to be stitched directly to the lining, then the layers of cloth, silk, or other material are stitched together on the opposite edges, and, lastly, the layers of cloth are secured together between the two bones by a row of stitching passing down between said bones. Each succeeding step serves to make the whalebone strips and layers of cloth practically one piece, because the bone is stitched directly to the layers of cloth, and then the layers of cloth are stitched tightly around the outside edges of the whalebone strips and then stitched between the whalebone strips.

It is obvious that the stay thus prepared when sewed into the dress is held always in the position in which it is originally placed in the dress, and consequently the dress will retain its shape, because the stay being practically one piece and being sewed directly to the dress no slipping of the parts can occur.

The layers of cloth may be of continuous lengths and may be cut of any desired lengths for use.

Of course it will be understood that more than two strips of whalebone can be used if desired, but the construction and arrangement would be exactly the same as that described for two strips.

What I claim as my invention is—

1. As an article of manufacture, a dress-stay comprising a plurality of strips of whalebone arranged edge to edge and separated from each other, and a cover of textile fabric for said strips, the plies of said cover being secured to each strip and to each other by through-and-through stitches.

2. As an article of manufacture, a dress-stay comprising a plurality of strips of whalebone arranged edge to edge and separated from each other, and a cover of textile fabric for said strips, the plies of said cover being secured to each strip and to each other between said strips by through-and-through stitches.

3. As an article of manufacture, a dress-stay comprising a plurality of strips of whalebone arranged edge to edge and separated from each other, and a cover of textile fabric for said strips, the plies of said cover being secured to each strip and to each other along the outer edges of said strips by through-and-through stitches.

4. As an article of manufacture, a dress-stay comprising a plurality of strips of whalebone arranged edge to edge and separated from each other, and a cover of textile fabric for said strips, the plies of said cover being secured to each strip and to each other between said strips and along the outer edges of said strips by through-and-through stitches.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 2d day of January, A. D. 1896.

GEORGE A. DODGE.

Witnesses:
A. L. MESSER,
A. E. DOANE.