

(No Model.)

A. A. ADAMS.
CORSET STIFFENER.

No. 595,510.

Patented Dec. 14, 1897.

Fig. 1.

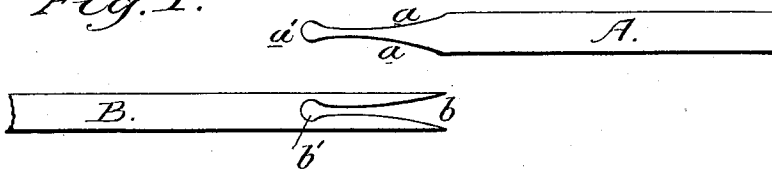


Fig. 2.

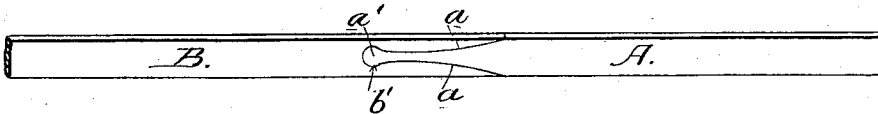


Fig. 3.

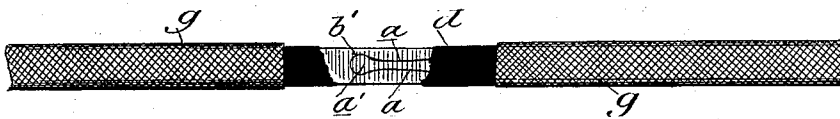


Fig. 4.

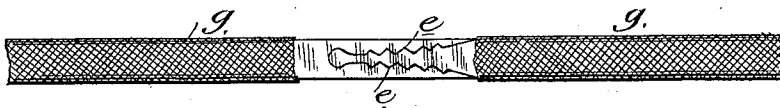


Fig. 5.



WITNESSES
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CORSET-STIFFENER.

SPECIFICATION forming part of Letters Patent No. 595,510, dated December 14, 1897.

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To all whom it may concern:

Be it known that I, ADELBERT A. ADAMS, a citizen of the United States, residing at Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Stiffeners or Stays, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to stays or stiffeners for corsets, skirts, and other articles of wearing-apparel; and it consists of the improved stay or stiffener which I shall hereinafter fully describe and specifically claim.

In the accompanying drawings, forming part of this specification, and in which like letters of reference indicate corresponding parts—

Figure 1 represents the separated parts or blades of whalebone, horn, or analogous material used in the construction of my improved stay or stiffener. Fig. 2 is a perspective view showing the parts united. Fig. 3 is a plan view of the stiffener, showing a portion of its outer braided or plaited covering removed to expose the underlying veneer of rubber. Figs. 4 and 5 represent other forms of the stiffener.

As whalebone used for dresses is most valuable in thirty-six-inch lengths, and as the slabs of whalebone which come to the manufacturer will in most cases not cut into regular lengths of thirty-six inches, there are left pieces of the slab less than thirty-six inches in length which are very much less valuable in proportion to the standard lengths, and many of these shorter pieces have often been regarded as waste. These slabs of whalebone have an outer surface which is called "enamel" or "shell," and which is about one-sixteenth of an inch in thickness and resembles in appearance horn, while the intermediate or central portion is of a fibrous nature and is called the "grain" and is valued at only about one-half in price of the enamel or shell. The grain cannot be successfully sewed through unless kept in a moist condition, and in either quality, the shell or the grain, it is not certain that the bone will not split in sewing or fastening it in place in a dress, corset, or other article of wearing-apparel. By

my invention I am enabled to utilize the short lengths of the slab when the latter is split in the usual manner and splice the meeting ends of the pieces, so that all exterior surfaces are in the same plane or flush with each other, the splice being of such a nature that when the end of one piece is let into a companion piece there is no danger of the pieces separating or pulling apart, said pieces being thus matched together and then provided with an outer braided covering, so that the joint or place of union of the two pieces cannot be distinguished from a bone that is composed of a single continuous length.

In carrying out my invention I prefer to stamp or otherwise cut or form the end of one blade or length A of bone with a tapered end or with outwardly-converging side edges *a*, terminating in an enlarged head or extremity *a'*, and likewise stamp or otherwise cut or form the end of the companion piece B with an opening *b*, having inwardly-converging walls terminating in a socket *b'*. When the pieces are thus formed, the ends accurately match and are fitted one into the other, the head or extremity *a'* fitting into the socket *b* and the converging walls lying closely against each other. This makes the edges and flat sides of the sections of bone flush and in the same continuous planes, while the enlarged head *b* of one section, fitting into the corresponding base of the socket of the other section, will effectually overcome the tendency of the sections separating or being pulled apart endwise. A splice of this character also does not produce any weak spot in the finished article, and it enables me to split the whalebone much thinner than is possible in other forms of composite stiffeners (thereby obtaining the greatest number of strips to the pound) without impairing the strength of the stiffener to any appreciable extent.

If desired, I may splice the strips or pieces as described and then cover them with a thin veneer or film of rubber composition *d* and then put on an exterior covering and roll the covered bone under considerable pressure to cause the parts to strongly adhere, as shown in Fig. 3, or I may reverse this operation and place the covering on the spliced section and the veneer of rubber on the exterior of the

covering. The rubber veneer, however, is not always essential, as I find that an outer covering *g* of silk, cotton, or other threads closely and tightly braided or plaited on the united sections of bone or horn will accomplish my purpose and enable the stiffener or stay to be sewed through by hand or by machine without danger of the bone splitting, thereby overcoming a fruitful source of trouble in placing whalebone stiffeners in dress-waists, corsets, bosom-pads, skirts, and other articles of wearing-apparel. The outer braided or plaited covering should have a coat of sizing or other well-known adhesive material to prevent the threads from unraveling when the bone is cut to lengths and to cause the outer covering to closely and intimately adhere to the whalebone throughout the several lengths which constitute the stiffener.

In Fig. 4 I illustrate the splice as being made more secure against endwise movement of the sections of bone by forming the edges of the male member *A'* with serrations or irregularities *e*, adapted to engage similar portions in the walls of the female member *B'*. By this construction the splice will be secure even if the head and socket connection of the splice shown in Fig. 1 is omitted.

Also, if desired, the splice may be wrapped transversely by a thread *d*, as shown in Fig. 5, and an adhesive substance applied. In this and in all other cases the braiding or plaiting is used to prevent the bone splitting when sewed longitudinally through its center by hand or sewing-machine.

Having thus described my invention, what

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

1. As an article of manufacture, a stiffener or stay consisting of two or more lengths or pieces of whalebone or analogous material having their meeting ends interlocked in the central longitudinal plane of the stiffener whereby the joint or interlocking portions are contained within the marginal edges of the pieces, and said pieces being of substantially uniform width and thickness whereby when united to form the stiffener, the sides and edges of the several pieces are in line and substantially flush one with the other, and an outer covering for the stiffener adhering thereto throughout the length thereof.

2. As an article of manufacture, a stiffener or stay consisting of two or more lengths or pieces of whalebone or analogous material having their meeting ends interlocked at points inside of the marginal edges of the pieces said pieces being of substantially uniform width and thickness whereby when united the sides and edges of the pieces are flush and form substantially smooth and continuous surfaces; a transverse wrapping of thread and an adhesive material about the interlocked portions and an outer braided or plaited covering adhering to the pieces throughout the length thereof.

In testimony whereof I affix my signature in presence of two witnesses.

ADELBERT A. ADAMS.

Witnesses:

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