

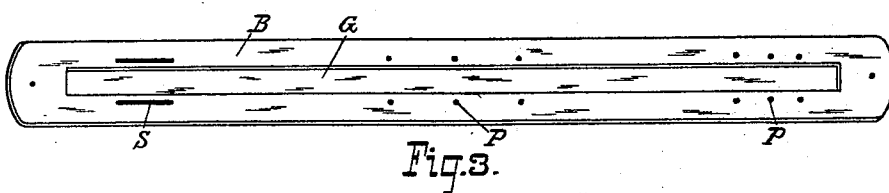
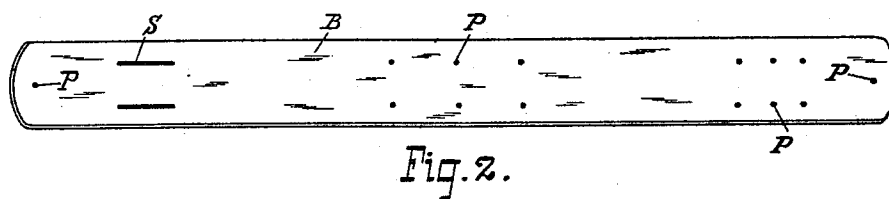
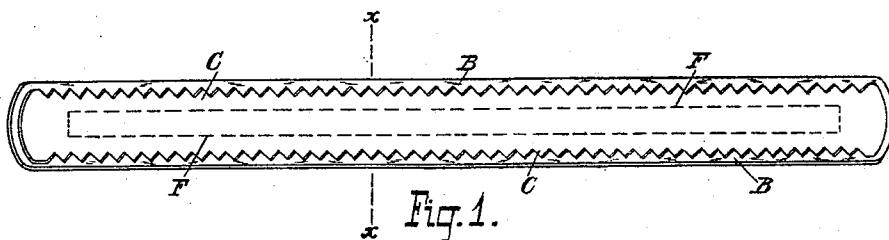
(No Model.)

2 Sheets—Sheet 1.

C. D. MAC KAY.
DRESS STAY.

No. 473,161.

Patented Apr. 19, 1892.



Attest
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Carl Hayden

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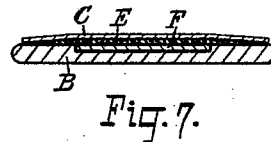
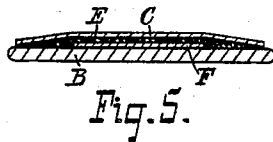
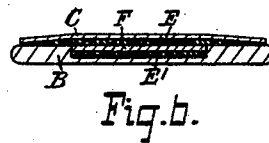
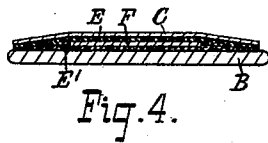
(No Model.)

2 Sheets—Sheet 2.

C. D. MACKAY.
DRESS STAY.

No. 473,161.

Patented Apr. 19, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES D. MACKAY, OF TORONTO, CANADA.

DRESS-STAY.

SPECIFICATION forming part of Letters Patent No. 473,161, dated April 19, 1892.

Application filed July 25, 1889. Serial No. 318,692. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. MACKAY, a subject of the Queen of Great Britain, and a resident of the city of Toronto, in the Province of Ontario, Canada, have invented a certain new and useful Dress-Stay, of which the following specification, taken in connection with the accompanying drawings, forms a full, clear, and exact description.

10 This invention relates to a stiffening-slip in a dress or garment; and it consists of a dress-stay formed of a layer of a pliable substance of a hard nature, such as celluloid, a layer of steel, a layer or layers of water-proof adhesive material, and a layer of fabric C, all cemented and securely held together as one slip by the layer or layers of water-proof adhesive material, as will be hereinafter first fully set forth and described, and then pointed out in the claims.

Reference being had to the accompanying drawings, Figure 1 is a plan view of a device embodying my invention. Fig. 2 is a plan view of the layer of the flexible hard substance, such as celluloid. Fig. 3 is a modification of Fig. 2, showing a groove therein. Figs. 4 and 5 are enlarged detail central cross-sectional views of my invention, showing a plain layer of the flexible hard substance, such as celluloid. Figs. 6 and 7 are enlarged detail central cross-sectional views of my invention, showing the grooved layer of the flexible hard substance, such as celluloid.

The dress-stays in general use are formed of spring-steel blades, because a very thin and narrow strip of this material is very light, durable, and flexible; but the thin edges of these spring-steel blades form sharp cutting-edges, the abrading of which on the surrounding fabric, caused by the movement of the wearer, very soon wears and cuts through the adjacent part of the fabric of which the dress or garment is formed, all of which is avoided and completely prevented by using my improved dress-stay.

My invention consists of a dress-stay formed of a layer B of a flexible substance of a hard nature, such as celluloid, rubberoid, or leatheroid, a layer of spring-steel or a steel blade F, a layer E or layers E E' of water-proof ad-

hesive material, such as rubber or rubber cement, and a layer of fabric C, all securely cemented together as one slip by the layer E or layers E E' of rubber or rubber cement. The layer B of the flexible substance of a hard nature, such as celluloid, is formed with rounded ends and edges to prevent it from abrading or injuring the surrounding fabric of the dress or garment, and it may be formed with or without the groove G, and this layer of celluloid is larger in cross-section than said steel blade, so that the abrading of the steel blade, caused by the movement of the wearer, will be expended on this layer of celluloid, which will have very little effect, if any, on a hard substance such as a layer of celluloid. This will avoid and completely prevent the steel blade from abrading or cutting the adjacent part of the fabric of the dress or garment.

The layer E or layers E E' of rubber or rubber cement used not only attach the fabric C, steel blade F, and plate B of celluloid together, but make the steel plate F water-proof. This keeps it from rusting, and consequently from staining the dress, and the fabric C not only prevents the layer E or layers E E' of rubber or rubber cement from adhering to the fabric of the dress, but at the same time in exposed positions gives the stay a neat appearance, and this stay may be secured in a corresponding pocket in the dress, or it may be secured thereto by stitching through the perforations P or slits S, or it may be secured in position by any well-known means, as found most suitable or convenient under the circumstances.

The advantage of a dress-stay constructed, as described, with a layer B of celluloid on one side only of the steel blade F is that it does not show ridges as prominently or is not so conspicuous in the dress as those stays where the celluloid surrounds or envelops the steel blade, and this stay wears longer, from the fact that the abrading of the steel blade F on the layer B of celluloid does not affect the latter the same as it does where the steel blade is surrounded with rubber and fabric only, through which soft rubber and fabric said steel blade rapidly wears and cuts the

dress, all of which, as before stated, is avoided and completely prevented by using my improved stay.

Having thus described my invention, I
5 claim—

1. As an article of manufacture, a stay
formed of a layer B of a flexible hard sub-
stance, such as celluloid, a layer of spring-
steel F, a layer E of water-proof adhesive ma-
10 terial, and a layer of fabric C, the whole se-
cured together as one slip by the layer E of
water-proof adhesive material located between
the steel and fabric covering and between the
fabric covering and the portion of the layer
15 of celluloid adjacent thereto, substantially as
shown and described, and for the purpose
specified.

2. As an article of manufacture, a stay

formed of a layer B of a flexible hard sub-
stance, such as celluloid, in which a recess G 20
is formed, a layer of spring-steel F, a layer E
of water-proof adhesive material, and a layer
of fabric C, the whole secured together as one
slip by the layer E of water-proof adhesive
material located between the steel and fabric 25
covering and between the fabric covering and
the portion of the layer of celluloid adjacent
thereto, substantially as shown and described,
and for the purpose specified.

In testimony whereof I affix my signature in 30
the presence of the two undersigned witnesses.

CHARLES D. MacKAY.

Witnesses:

P. J. EDMUNDS,

A. EDMUNDS.