R. B. WHEELER. GARMENT STAY.

GARMENT STAY. Patented May 21 1889. No. 403,809. Fig.1.

United States Patent Office.

ROSCOE B. WHEELER, OF DETROIT, MICHIGAN.

GARMENT-STAY.

SPECIFICATION forming part of Letters Patent No. 403,809, dated May 21, 1889.

Application filed July 16, 1888. Serial No. 280,089. (No model.)

To all whom it may concern:

Be it known that I, ROSCOE B. WHEELER, a citizen of the United States, residing at Detroit, in the county of Wayne and State of 5 Michigan, have invented certain new and useful Improvements in Garment-Stays; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which 10 it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention in garment-stays is designed as an improvement on my patent, dated March 20, 1888, No. 379,882, and on that class of stays known as the "self-attaching," the construction of the stay being such that it may 20 be rapidly attached to a garment or to the marginal edges of the open seams of dresswaists without sewing. In the latter position this stay takes the place of the common whalebone and various styles of covered steels 25 which require stitching to the garment. In my former patent the steel or flexible blade is faced on one side with a textile fabric and on the opposite side with a coating or covering of gutta-percha tissue, the gutta-percha 30 side being placed next to the garment and a hot iron to the textile-fabric side of the stay, whereby the gutta-percha is fused, thus uniting the stay to the garment.

It is sometimes necessary to let out the 35 seams of a dress-waist which are under the arms, so as to enlarge the waist, and when the backs of the stays are covered with guttapercha, as in my former patent, the removal of the stay from the open seam, so as to let 40 out the seam, leaves parts of the gutta-percha sticking to the garment, which, when let out, leaves stains along the let-out seam. To avoid this deficiency is one of the objects of this

invention.

In the construction of this stay the textile covering and the gutta-percha are applied to the steel or flexible blade on the same side, the gutta-percha lying next to the steel and the textile fabric outside. By this arrange-50 ment the back face of the steel or flexible blade is left exposed, or is not faced or coated with the gutta-percha. I also protect the ends |

of the metal or steel blade by a strip of textile fabric which crosses the blade at the ends on the back face. The end linings are se- 55 cured to the textile-fabric covering of the front face of the stay by applying heat, whereby the gutta-percha firmly unites the parts. The end linings to the blade are used when a thin sheet of gutta-perchais employed. When 60 using the heavy grade of gutta-percha, the linings may be dispensed with, as the guttapercha will have a sufficient body to properly cement the ends of the blade to the textilefabric covering.

With reference to the accompanying drawings, forming a part of the specification, I will proceed to describe the invention, in

which---

Figure 1 is a back plan of two series of 70 stays as they appear in sheet form according to my invention, and in said view the zigzag lines indicate the points of separation. Fig. 2 is an isometrical view of a portion of a dresswaist, showing my improved stay partly at- 75 tached thereto, one end being turned up to show the open or main seam. Fig. 3 is an enlarged cross-section of Fig. 2. Fig. 4 is an enlarged longitudinal central section of my improved stay.

In Fig. 1, D represents the stay in sheet form. In said view the black surface represents the coating or layer of gutta-percha. S represents the steel or flexible blades, and ZZ are strips of textile fabric which cross 85

the ends of the series of blades.

The stay consists of the flexible or flat metallic blade S. This blade is faced on one side only with a textile fabric, A, or like covering. This covering is wider and longer than 90 the blade, whereby the marginal edge i is formed. Between the blade and the textilefabric covering is placed a coating or sheet of gutta-percha, H. The gutta-percha projects beyond the edges and ends of the blade, 95 the same as the cloth covering or facing A, whereby an adhesive or gutta-percha margin, a, is formed along each edge and the ends of the blade on the back side. (See Figs. 1, 2, and 4. To more firmly secure the ends e of 100 the blade, a strip of textile fabric, Z, paper, or like thin flexible material, is placed so as to cross the ends of the blade. (See Figs. 1, 2, and 4.) The parts thus arranged are united

by applying to the textile-fabric covering a hot iron, whereby the gutta-percha is fused and the parts are united, thereby retaining

the steel or blade in position.

This stay is made in sheet form, as shown in Fig. 1, which is accomplished by laying a series of the blades S on a suitable table or platform, and at the same distance from each other. The thin sheet of gutta-percha, H, is 10 then laid on said blades. On this sheet of gutta-percha the textile fabric, A, is placed. A hot iron is then passed over the fabric, A, whereby the gutta-percha is fused, and when cool the parts are united in sheet form. 15 This sheet D is then turned over, as shown in Fig. 1, and the strips of cloth, Z, paper, or like material are placed so as to cross the ends e of the blades. A hot iron is then applied to said strip, melting the gutta-percha 20 along the ends of the steels, thereby uniting the strip to said steels and to the fabric, A, thus forming the lining-tips t. The strips Z are then cut by a knife or pinking-wheel along the lines 8, and then at a point midway be-25 tween the blades, as shown at 4 of Fig. 1, thus producing the completed stay.

In Fig. 2, F represents a portion of a dress-waist, in which f is the lining, 2 the open seam, and n n the marginal folds of the seam.

The stay is attached to the dress-waist by placing it centrally over the open seam 2, as shown in Fig. 2. Then a hot sad-iron is applied to the fabric side A of the stay, whereby the marginal edges a a of gutta-perch are 15 fused and the stay is attached to the garment. It will be observed that there is no gutta-percha on the under face of the blade S. Therefore the portion of the garment along

each side of the seam 2 does not become coated or stained with the gutta-percha. (Said 40 space is indicated by dotted lines in Fig. 2.) This construction will therefore allow the removal of the stay and the letting out of the seam for ordinary purposes.

The stay can be removed by first applying 45 a warm sad-iron and lifting on the stay while

the gutta-percha is warm.

Having thus fully set forth my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. A stay for the stiffening of garments and adapted to be attached thereto by heat and pressure, the same consisting, essentially, of a backing of cloth, a layer of gutta-percha identical in size with said backing and secured thereto, and the resilient metallic blade, narrower and shorter than the backing and adhesive to the face of the gutta-percha in such a position as to leave an exposed margin of gutta-percha surrounding said blade at the 60 edges and ends thereof, whereby the whole structure may be attached in position upon the garment, substantially as set forth.

2. A garment-stay, the same consisting of a steel, S, and the fabric faced with gutta-65 percha tissue, whereon the steel S is centrally placed, and to which it is adherent, the aforesaid elements being arranged in the order and adapted to operate as and for the purpose

set forth.

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

ROSCOE B. WHEELER.

Witnesses:

EDGAR S. WHEELER, ROBERT YOUNG.