

L. J. JOHNSON.
CORSET STIFFENER.
APPLICATION FILED FEB. 16, 1912.

1,061,081.

Patented May 6, 1913.



Fig. 1

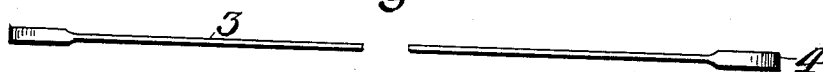


Fig. 2

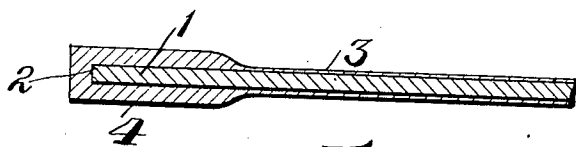


Fig. 3

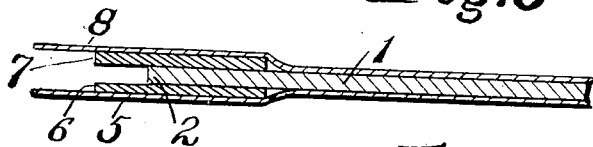


Fig. 4

Witnesses:
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UNITED STATES PATENT OFFICE.

LAWRENCE JOHN JOHNSON, OF AKRON, OHIO, ASSIGNOR TO THE SUMMIT RUBBER COMPANY, OF BARBERTON, OHIO, A CORPORATION OF OHIO.

CORSET-STIFFENER.

1,061,081.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LAWRENCE JOHN JOHNSON, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented new and useful Improvements in Corset-Stiffeners, of which the following is a specification.

This invention relates to improvements in stiffeners for corsets, waists, and other wearing apparel, and the object thereof, broadly speaking, is to provide a stiffening medium of resilient material, preferably of metal, provided with an adherent flexible covering or coating of a water-proof material.

More specifically, the object of the invention is to provide a stiffener of resilient material, such as metal, provided with an adherent water-proof flexible covering for preventing the metal from oxidizing and with the ends of the device provided with reinforced portions to increase the thickness of the device at these points to prevent them from working loose through the material in which the stiffener is placed.

A still further object is to so construct the end portions, that the cover of the stiffener which envelops the main body portion of the device will also extend over and cover the reinforced portions and preferably united therewith so as to make it possible to not only cover the reinforce portions but also cover the body of the stiffener at one operation.

With the foregoing and other objects in view, the invention consists in the novel construction, combination and arrangement of parts constituting the invention to be hereinafter specifically described and illustrated in the accompanying drawings which form a part hereof wherein is shown the preferred embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claim hereunto appended.

In the drawings in which similar reference numerals indicate like parts in the different figures, Figure 1, is a plan view of a stiffener embodying this invention; Fig. 2, is a view in side elevation of the same; Fig. 3, is a sectional view of a portion of the stiffener on line X of Fig. 1; and, Fig. 4, is a view similar to Fig. 3 showing the device in the process of construction, to

illustrate the method by which the same is manufactured.

Stiffeners of the type herein referred to usually comprise a body portion consisting of a unitary strip of spring steel with the ends thereof preferably rounded and are covered with some protective medium intended to prevent their oxidizing and which also serves to cushion the ends thereof in such a manner that the stiffeners when incorporated in an article of wearing apparel, such as a corset, will not cut their way through the fabric and become loosened or freed therefrom.

Referring to the drawings in detail the reference numeral 1 indicates the body portion of the stiffener which preferably comprises a strip of spring steel with the ends 2 thereof usually rounded. The invention consists in coating this body portion 1 with an adherent skin coating 3 of vulcanized hard rubber and provided at the ends of said body-portion with a thickened or reinforced portion 4 preferably of the same material as the coating 3. These stiffening devices are customarily made by placing on a sheet of 80 unvulcanized rubber 5 transversely-extending strips 6 of unvulcanized hard rubber and then superposing thereon the metallic stiffeners 1 with each end thereof extending over a reinforcing strip 6 after which the 85 bodies of the strips 1 are covered by means of second layers of reinforcing material 7 of unvulcanized hard rubber, after which a second or upper layer of rubber is superposed on the whole and covering the upper faces 90 of the strips and the upper layers or reinforces. In this condition the composite mass is passed between soft resilient rollers such as rubber rollers which cause the unvulcanized rubber layers to unite with each 95 other intimately and with the metallic body portions 1. After vulcanizing the rubber the surplus vulcanized rubber is trimmed leaving the product in the condition shown in Figs. 1 and 2. During vulcanization the 100 layers 5 and 8 intimately unite not only with the metallic strip 1 but also with the reinforced strips 6 and 7 so as to completely inclose the ends of the strip with a thickened portion of hard rubber thereby effectively 105 covering and protecting the metallic stiffener from the action of perspiration attendant on their use and also thereby providing the

ends of the strip with enlarged portions at the ends which prevent their cutting or tearing their way through the fabric in which they are embedded.

5 It will be pointed out that by placing the reinforcing strips 6 and 7 on opposite faces of the metallic members 1 and near the ends thereof and then covering them by means of the unvulcanized layers 5 and 8,
10 the latter layers are not interrupted and no joint is thereby formed at the point where the reinforced portions are united with the main body portion of the covering of the stiffeners, the layers 5 and 8 continuing un-
15 interrupted over the reinforced portions to thereby present a smooth and finished product when the rubber has been subjected to vulcanization.

I claim:

A stiffener for corsets and like wearing 20 apparel embodying a resilient metallic strip having the ends thereof covered by reinforced portions of vulcanized hard rubber and a continuous uninterrupted covering of hard rubber completely covering said strip, 25 and united with said reinforced portions to form a water proof covering for said strip, and provide thickened portions at the ends thereof.

In testimony whereof I have hereunto set 30 my hand in presence of two subscribing witnesses.

LAWRENCE JOHN JOHNSON.

Witnesses:

C. E. HUMPHREY,

A. L. McCLINTOCK.