J. G. HALAPLEUS & A. LAMB.

SUSPENDERS OR THE LIKE.

APPLICATION FILED JAN. 19, 1917.

1,283,745. Patented Nov. 5, 1918.

Fig. 1.

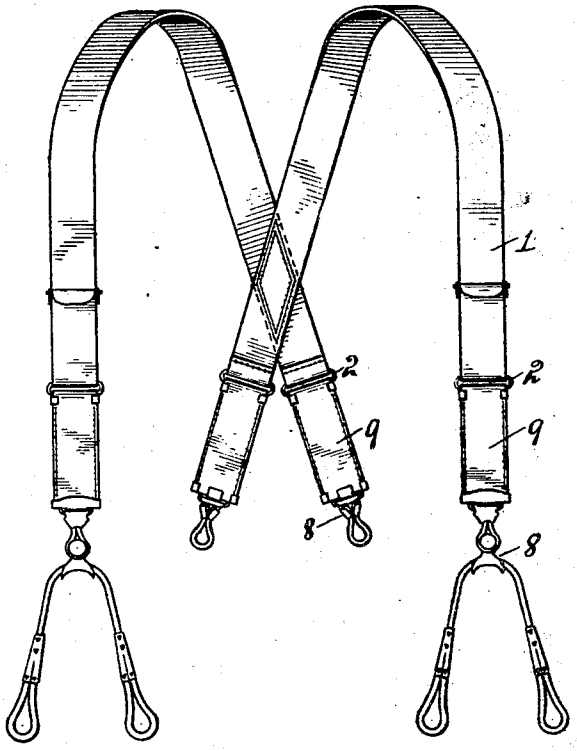
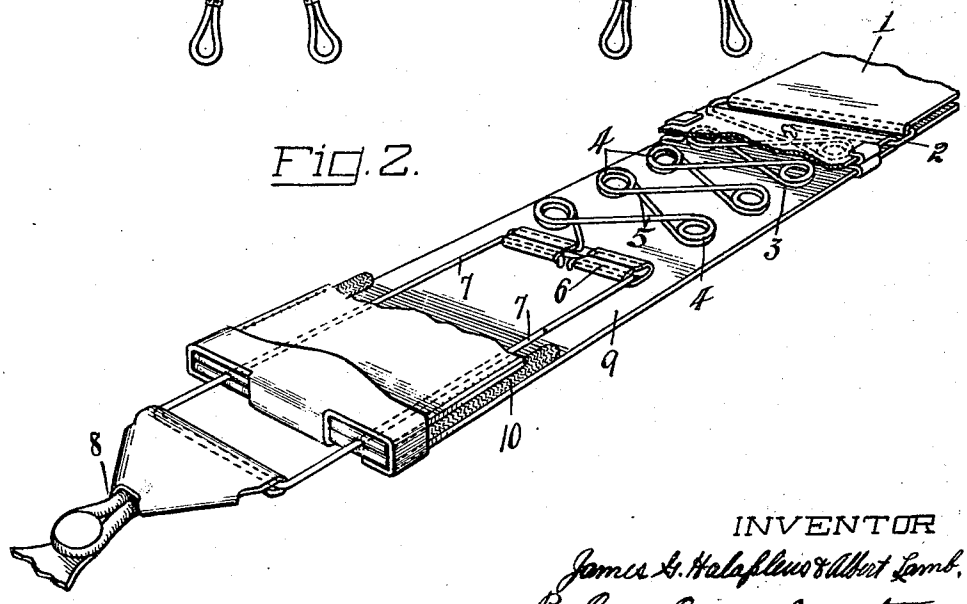


Fig. 2.



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UNITED STATES PATENT OFFICE.

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SUSPENDERS OR THE LIKE.

1,283,745. Specification of Letters Patent. Patented Nov. 5, 1918.

Application filed January 19, 1917. Serial No. 143,288.

To all whom it may concern:

Be it known that we, JAMES G. HALAPLEUS and ALBERT LAMB, citizens of the United States, and residents of Toledo, in the county of Lucas, and Lakewood, in the county of Cuyahoga, respectively, in the State of Ohio, have invented certain new and useful Suspenders or the like; and we do hereby 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 it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

This invention relates to elastic means for use more particularly in suspenders, garters and similar articles. The object of our invention is the provision of an improved means of the character described, which is intended to take the place of the rubber elastic means customarily used in suspenders and in garters of the corset type, and to provide a more efficient, durable and satisfactory elastic means than has heretofore been used in such articles. Other objects and advantages of the invention will be apparent from the following detailed description thereof.

While the invention, in its broader aspect, is capable of embodiment in numerous forms, a preferred embodiment thereof is illustrated in the accompanying drawings, in which,—

Figure 1 is a view of a pair of suspenders embodying the invention, and Fig. 2 is an enlarged view of a portion thereof partly broken away.

Referring to the drawings, 1 designates a strap-like anchor member which may form part of a suspender for trousers, or of a garter of the corset type. This member, in the present instance, is adjustably looped through a wire loop 2, which is provided at the upper end of the means forming the resilient member 3 of the suspender or garter.

The resilient member 3, in the present instance, comprises a spring-wire forming successive coils 4 and diagonally-extending cross or coil connecting parts 5, as shown, adapted to be normally contracted within a small space with the alternate coils in edge abutment. The coil ends preferably cross each other as they extend from the respective coils. The loop 2 may, if desired, comprise an integral extension of the upper or inner end of the wire forming the spring member 3, as shown in Fig. 2.

The lower or outer end of the spring member 3 is connected by a clip 6 or other suitable means to one end of a plunger part 7, which carries a button or stocking engaging means 8 at its outer end. The part 7 comprises a wire which, in the present instance, is bent in elongated rectangular form. It is not, however, restricted to this shape.

A case 9 of flexible nature incloses the spring 3 and greater portion of the plunger 7, and may be formed by doubling a length of strap or tape-like material of suitable form on itself with its upper looped end in engagement with the loop 2, and with the spring 3 disposed between its folds. The side edges of the strap folds are spaced by edge cords 10 sewed therein, or in any other suitable manner. The longitudinal wires of the plunger 7 project from the lower or outer end of the case. When the spring is in its normal contracted form all of the plunger 7, with the exception of the outer end extremity thereof, is drawn within the case. The permissible expansion of the spring is limited by the upper or inner end of the plunger striking the partially closed outer end of the case, thus preventing the spring from being stretched to such an extent as to be likely to cause permanent injury or distortion thereof.

It is evident that we have provided a resilient means which is admirably adapted for use in suspenders and in garters of the corset type, and when so used, enables such articles to be worn with ease and comfort. The use of our invention also obviates the necessity of continuously replacing the elastic portions of such articles, when of rubber, by reason of the rubber becoming stretched out and broken.

We wish it understood that our invention is not limited to any specific construction, arrangement, or form of the parts, except in so far as such limitations are specified in the claims.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In combination in an article of the class described, a suspending member having a loop at its lower end, a flat elongated case, a wire spring of flattened form disposed with-

in said case at one end portion thereof and capable of longitudinal expansion from normal position lengthwise of the case, the wire forming said spring extending from one end thereof without the adjacent case end and through the loop of said suspending member and serving both to hingedly anchor the case and spring at their inner ends to said member, and article engaging means connected to the free end of said spring and projecting without the outer end of the case.

2. In combination, in an article of the class described, a suspending member having a loop at its lower end, a flat elongated case, a wire spring disposed within said case at one end thereof and capable of longitudinal expansion from normal position lengthwise thereof, the wire extending from the inner end of said spring transversely thereof through a side edge of the case adjacent to its inner end, thence extending through said member loop, thence reëntering the case at the opposite edge thereof from which it extended and engaging said spring end and serving to hingedly anchor both the case and spring to said member, and article engaging means connected to the free end of said spring and movably projected without the outer end of the case.

In testimony whereof, we have hereunto signed our names to this specification.

JAMES G. HALAPLEUS.
ALBERT LAMB.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."