Aug. 10, 1948. H. G. HILL 2,446,590

ABDOMINAL AND GARTER SUPPORT

Filed June 11, 1947

Fig. 1.

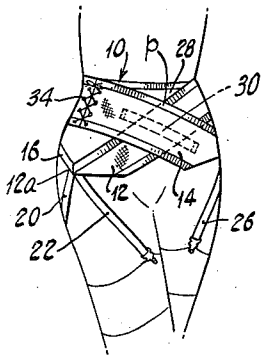


Fig. 2.

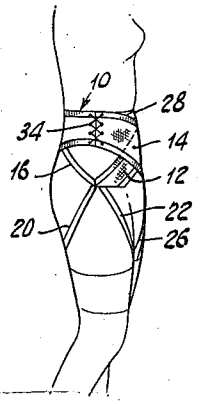


Fig. 3.

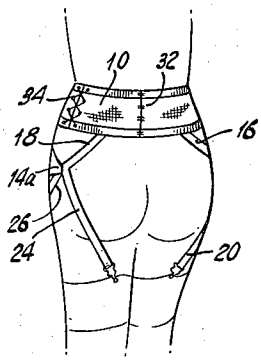


Fig. 4.

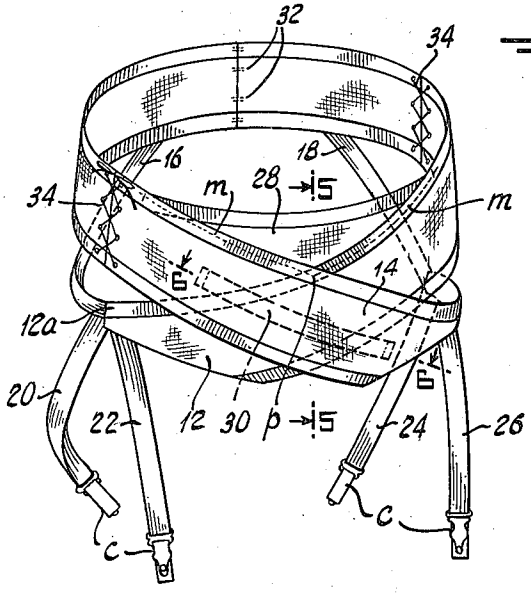


Fig. 5.

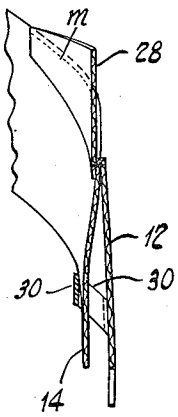
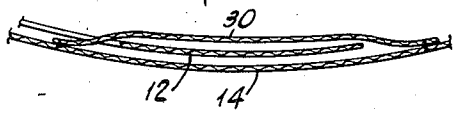


Fig. 6.



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ABDOMINAL AND GARTER SUPPORT

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Application June 11, 1947, Serial No. 753,963

3 Claims. (Cl. 2—306)

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This invention relates to a combination abdominal and hose supporting device.

An object of the invention is to provide co-acting abdominal and garter support means each of which contributes to the effectiveness of the other.

Another object of the invention is to provide a unitary garter and abdominal support, adapted to support the abdomen at all times while also providing freedom of movement and maintaining substantially constant tension on the stockings regardless of the bodily movements of the user.

Another object of the invention is to provide a simple and practical device of the above mentioned kind.

Other objects of the invention will be in part obvious or in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements, arrangements of parts, and in the several steps and relation and order of each of said steps to one or more of the others thereof, all as will be pointed out in the following description, and the scope of the application of which will be indicated in the following claims.

The invention will best be understood if the following description is read in connection with the drawings, in which,

Figures 1, 2, and 3 are front, side and rear views respectively of the device in use;

Figure 4 is a perspective view of a device embodying the invention;

Figure 5 is a sectional view taken on the line 5—5 of Figure 4; and

Figure 6 is a sectional view taken on the line 6—6 of Figure 4.

The embodiment of the invention described herein comprises a strip of material 10, preferably elastic and on the order of three to four inches in width, extending across the user's back at the waist line and over the hips, with the end portions 12 and 14 crossed in front of the body and extending down over the abdomen to the user's thighs respectively. The extremities of said members 12 and 14 are interconnected with the intermediate or back portion of the strip by straps 16 and 18 respectively, said straps being inclined forwardly at an angle substantially equal and opposite to the inclination of the end portions to which they are respectively attached thus defining triangular support means over the thighs respectively having the downwardly pointed apices 12^a and 14^a respectively. From the apex 12^a, formed by the intersection of end portion 12 and strap 16, garters 20 and 22 are suspended. Similarly from the apex 14^a, formed by the intersection of the end portion 14 and strap 18, garters 24 and 26 are suspended. They are disposed so that they are angularly related to one another and are substantially elongations of the end portions 12 and 14 and the straps 16 and 18 respectively. The garter of each pair of garters are adapted to extend to the front and rear of the user's leg respectively, and are provided at their lower ends respectively with stocking engaging means such for example as clasps c.

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Because of the ability of the device to distribute pulls and strain and thus accommodate bodily movements of the user the garters comprising each pair do not tend to move together around the user's leg thus causing wrinkling of the stocking, but are maintained in place and exert a substantially constant tension on the stocking at all times regardless of the bodily movements of the user. The pull of the stockings conversely serves to hold down the end portions 12 and 14 over the abdomen.

A triangular piece 28 is provided above the upper margins of the crossed end portions 12 and 14 and cooperates with the intermediate or back portion of strip 10 to complete the encirclement of the user's waist. This piece is attached along its lower margins to the top margins of the upper portions of said ends 12 and 14 respectively, as by the lines of stitching *m, m,* thus bridging the V-shaped space between them. The upper portions of the top margins of said ends 12 and 14 are thus each joined to piece 28 and the said top margins are directly jointed together at their point of crossing *p*. Below the said point of crossing of the upper margins the end portions are not secured together but one portion, portion 14 as shown herein, is provided with the loop member 30 extending longitudinally of said end member and attached thereto at its extremities, and the end 12 is threaded through the said loop 30, whereby the said ends are slidingly related to one another and are thus kept together while being capable of relative movement to accommodate movements of the user.

The cross piece 28 is maintained in position at all times across the top of the user's abdomen while the interconnected upper margins of the end members 12 and 14 extend over the central portion of the abdomen and the crossed ends 12 and 14 extend over the lower portion of the user's abdomen, giving support thereto while being capable of relative movement one to the other.

As shown in the drawings the strip 10 may comprise a plurality of parts adapted to be joined together at the rear of the user's waist as for ex-

ample by hooks and eyes or other attachment means indicated generally by the reference numeral 32. And if desired the strip 10 may be further divided over the user's thighs and the adjacent portions adjustably joined together as by laces 34.

The structure described provides a firm and constant abdominal support and at the same time provides garter support means which is self adjusting to movements of the body, so that bending for example in one direction will cause a relative movement between the portions 12 and 14 thus tending to maintain constant the position of the apices 12^a and 14^a of the triangular supports for the pairs of garters respectively whereby substantially even tension on the stockings is provided at all times regardless of body movements of the user.

Relative movement between end members 12 and 14 distribute the pull exerted on the user's stockings in front or behind according to the bodily movement of the user, thus maintaining substantially constant tension on the stockings at all times, and without restricting the freedom of movement of the user, while the garters through their attachment to the user's stockings create a steady downward pull on the bottom of the end members 12 and 14 thereby causing these members to exert a steady pressure on the abdomen. Thus the garters 20 and 22, and 24 and 26, and the end members 12 and 14, respectively, cooperate and interact in a way such that both the garters and the end members are more useful support means than they would be if either were used without the other.

It will thus be seen that there has been provided by this invention an article in which the various objects hereinabove set forth together with many thoroughly practical advantages are successfully achieved. As various possible embodiments might be made of the mechanical features of the above invention and as the art herein described might be varied in various parts, all without departing from the scope of the invention, it is to be understood that all matter hereinbefore set forth or shown in the accompanying drawing is to be interpreted as illustrative and not in a limiting sense.

What I claim is:

1. An abdominal and garter support comprising, a strip of elastic or the like extending across the user's back and over the hips, with the end portions crossed in front of the body and extending down over the abdomen to the user's thighs respectively, the upper margins of said crossed ends being interconnected at the point of crossing, but said ends being unconnected below their said upper margins, one of said end portions having a longitudinally extending loop through which the other end portion is threaded, straps interconnecting the intermediate, back portion of the strip with the extremities of said end portions respectively, and garters depending from the points of union of said straps and end portions respectively.

2. An abdominal and garter support comprising a strip of elastic or the like extending across the user's back and over the hips, with the end portions crossed in front of the body and extending down over the abdomen to the user's thighs respectively, a cross piece which cooperates with the back portion of the strip to complete the encirclement of the user's waist interconnected between the upper portions of the upper margins of said end portions of said strip respectively above the intersection of said margins, said end portions being unconnected below the intersection of said margins but one of them having a loop through which the other is threaded so that said end portions are slidingly related, straps interconnecting the intermediate, back portion of the strip with the extremities of said end portions respectively, and garters depending from the points of union of said straps and end portions respectively.

3. An abdominal and garter support comprising a strip of elastic or the like extending across the user's back and over the hips, with the end portions crossed in front of the body and extending down over the abdomen to the user's thighs respectively, a triangular cross piece which cooperates with the back portion of the strip to complete the encirclement of the user's waist said cross piece extending above the intersection of the upper margins of said ends and connected to the upper margins of said end portions respectively, said end portions being unconnected below the said intersection of their upper margins, straps interconnecting the intermediate, back portion of the strip with the extremities of said end portions respectively, and garters depending from the points of union of said straps and end portions respectively.

HELEN GRAY HILL.