

E. KARLIN.
 COMBINED SHOULDER BRACE AND ABDOMINAL SUPPORT.
 APPLICATION FILED JUNE 10, 1916.

1,303,330.

Patented May 13, 1919.

Fig. 1.

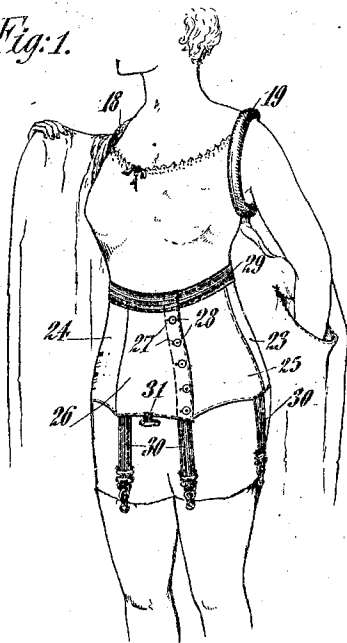


Fig. 2.

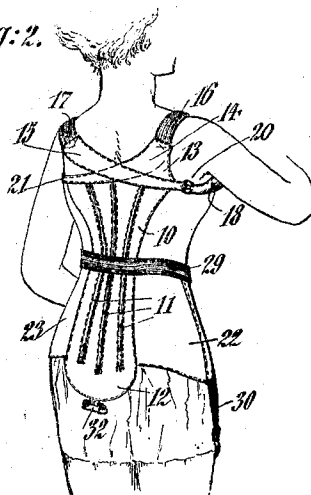


Fig. 3.

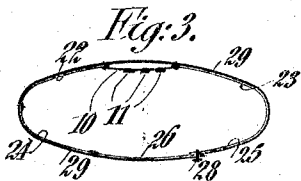


Fig. 4.



Fig. 5.

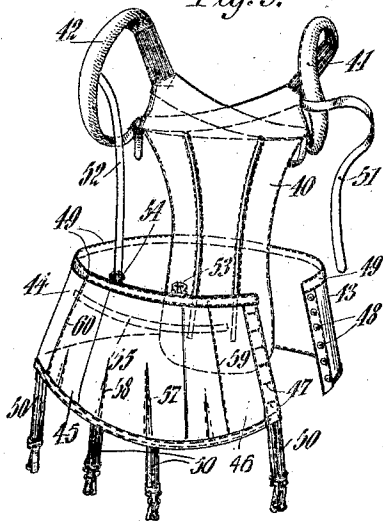


Fig. 7.

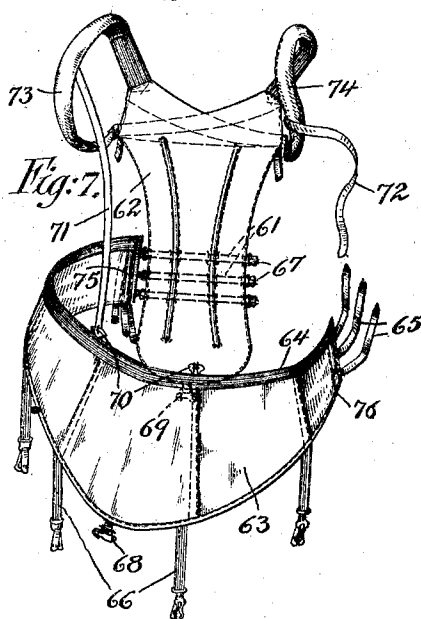
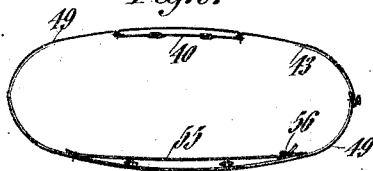


Fig. 6.



INVENTOR
Ester Karlin
 BY *Carl P. Cappel*
 ATTORNEY

UNITED STATES PATENT OFFICE.

ESTER KARLIN, OF NEW YORK, N. Y.

COMBINED SHOULDER-BRACE AND ABDOMINAL SUPPORT.

1,303,330.

Specification of Letters Patent.

Patented May 13, 1919.

Application filed June 10, 1916. Serial No. 102,842.

To all whom it may concern:

Be it known that I, ESTER KARLIN, a citizen of the United States, and resident of New York, in the borough of the Bronx, county of the Bronx, city and State of New York, have invented certain new and useful Improvements in Combined Shoulder-Braces and Abdominal Supports, of which the following is a specification.

The present invention relates to improvements in a combined shoulder brace and abdominal support, and has for its object to provide such a device which may be worn to replace the corset, and while performing all of the functions of the corset, will have none of its harmful features. My improved garment is intended to provide an effectual shoulder brace and an abdominal support, which will be healthful, washable, comfortable, free of staves at the front and sides, and capable of supporting and molding the body of the wearer in such manner as to be in no way injurious. For these reasons my invention is especially suitable for growing children, women athletically inclined, and as a maternity garment. Another object of the invention is to provide such a garment which will dispense with lacing, and will retain its correct position on the body, however strenuous the movements of the wearer may be, and in which the abdomen may be dependently supported from the waist line of the wearer and the back and shoulders supported and braced in such manner as to give the same a healthful position and prevent strain thereon.

A further object is to provide such a garment which will be adjustable, and of such simple and inexpensive construction as to be produced with comparative economy.

With these and other objects in view, my invention is shown in the accompanying drawings, and will hereinafter be more fully described with reference thereto and finally pointed out in the claims.

In the accompanying drawings:

Figure 1 is a front view showing my improved shoulder brace and abdominal support as worn,

Fig. 2 is a rear view thereof,

Fig. 3 is a sectional view taken immediately above the waist line,

Fig. 4 is a sectional view of the padded arm band,

Fig. 5 is a perspective view of a slightly

modified form of construction, particularly intended as a maternity garment,

Fig. 6 is a sectional view thereof, taken immediately above the waist line, and

Fig. 7 is a perspective view of a further modified form of construction.

Similar reference characters indicate corresponding parts throughout the several figures of the drawings.

Referring to the drawings, and more particularly to Figs. 1 to 4 thereof, my improved garment comprises a back engaging portion 10, having a natural conforming shape, contracted at the waist line, and provided with a plurality, and preferably three, stays 11 extending lengthwise thereof, leaving the extreme lower end, which is rounded as at 12 and the upper end unstiffened or flexible. The upper flexible end is enlarged as at 13 and is provided with crossed reinforcing pieces 14 and 15, of gradually decreasing width from the upper to the lower position and constituting a laterally disposed non-yieldable shoulder engaging band extending at each side of the spine, and engaging the scapulae of the wearer. The upper ends of the said reinforcing pieces are provided respectively with elastic bands 16 and 17 to which are secured padded arm bands 18 and 19, adapted to be secured at their extremities to buckles 20 and 21 provided at the lower ends of the reinforcing pieces 14 and 15. The bands 16 and 17 and the shoulder band exert a substantially lateral and rearward bracing effect upon the shoulders.

The said padded arm bands are formed from two pieces of material 18^a and 18^b as clearly shown in Fig. 4, sewed in such manner as to present a smooth exterior surface, the padding 19^a being sewed in so as to retain its shape and be free of "lumps".

At the lower half or rear hip engaging portion of the back engaging portion 10, and secured along each straight edge are provided hip engaging portions 22 and 23, having arched lower edges, and to these portions are secured side abdominal engaging portions 24 and 25, also having arched lower edges. To the said portion 24 there is secured a front portion 26, provided along its free end with a plurality of button holes 27 adapted to be engaged by a plurality of buttons 28, provided along the free end of the portion 25. An elastic waist engaging band

29 extends along the upper edges of the portions 22, 23, 24, 25 and 26, and exteriorly across the back engaging portion, being secured at its lower edge to the said portions 22, 23, 24, 25 and 26, and being free at the said back engaging portion, as clearly indicated in Figs 2 and 3, and adapted to circumferentially engage the waist of the wearer, in a manner as to dependently support the abdominal support therefrom.

Hose supporters 30 are provided at each side of the front portion 26 and the portions 24 and 25.

These with the coöperation of the elastic band 29 and the brace formed by the back engaging portion and arm bands, serve to maintain the garment in correct position upon the wearer, and without stays at the front and sides. At the lower extremities of the front and back engaging portions there are respectively secured tabs, upon which safety pins 31 and 32 are provided.

In Figs. 5 and 6 I have shown a slightly modified form of construction, particularly intended as a maternity garment. This construction consists of a back engaging portion 40, and arm bands 41 and 42 similar in construction to the first form of my invention, with the exception that the back engaging portion is preferably only provided with two stays. At one side of the back engaging portion there is provided a hip engaging portion 43, and at the other side there is provided a hip and side abdominal engaging portion 44 to the forward edge of which is secured a front portion 45, to which there is in turn secured a side abdominal engaging portion 46. Button holes 47 are provided along the free end of the portion 46, which are adapted to be engaged by buttons 48, provided along the free end of the portion 43. A non-elastic tape or band 49 is secured to the upper edge of the portions 43, 44, 45 and 46, extending unattached across the back engaging portion 40, as clearly indicated in Fig. 6. Hose supporters 50 are provided along the lower edge of the abdominal support, which may be secured to the hosiery in the usual manner. In order to effectually support the weight of the abdomen, bands 51 and 52 are provided on the arm bands which connect respectively with buckles 53 and 54 at each side of the front portion 45.

A band 55 is provided interiorly of the abdominal support which may be either elastic, or non-elastic, in which case it is secured to a buckle 56, as shown in Fig. 6 to permit of its adjustment. Gusset plaits 57 and 58 are provided in the front portion 45 of the abdominal band, to make the same conforming, and adjusting plaits 59 and 60 are arranged preferably in the portions 44 and 46, which may be taken in, or let out as desired. The lower edge of the hip and

abdomen engaging portions is laterally disposed and substantially parallel with the waist band. In Fig. 7 I have shown a further modified form of construction, in which the abdominal band is made detachable from the back engaging portion which is similar to that shown in Fig. 5. A plurality of transversely disposed tapes 61 are secured at the waist line of the back engaging portion 62, at the ends of which buckles 67 are provided.

The abdominal support 63 is made in a plurality of sections, and is provided along the upper edge with a band 64. At each end there are provided a plurality of tapes 65 which may be adjustably secured to the buckles 67 at each side of the back engaging portion. Hose supporters 66 are provided at the lower edge of the abdominal support. Buckles 70 are provided at the upper edge of the abdominal support for engagement with the tapes 71 and 72 suspended from the arm bands 73 and 74, which are similar to those shown in Fig. 5.

With my improvements, a garment is provided particularly suited for the needs of the modern day woman, its characteristics of hygiene and comfort making the same well suited to its purposes. The combined effect of the shoulder brace, the fixed positioning of the abdominal band by means of the back engaging portion and the elastic band, and the downwardly pulling effect of the hose supporters, result in the producing of a correct posture, without harm to the body, or discomfort to the wearer.

The garment may be worn by growing children to great advantage, preventing stoop shoulders, correctly supporting the body, and dispensing with the necessity of band garters, brassières or other such apparel, which are recognized as harmful to the undeveloped body of a child. The second form of my invention, intended especially as a maternity garment adapts itself suitably to all of the conditions required.

I have illustrated and described a preferred and satisfactory form of my invention, but it is obvious that changes may be made therein within the spirit and scope thereof as defined in the appended claims.

I claim:

1. In a garment of the character described, an elongated back member comprising a shoulder blade engaging portion, a rear hip engaging portion, and an intermediate spine engaging portion provided with corset stays, adjustable arm bands connected at their upper ends with the upper extremity of said shoulder blade engaging portion, adapted to pass forward over the shoulders and backward under the arms and connected at their lower ends with said back member at points in line with said blade engaging portion thereof, said shoulder blade engaging por-

tion and arm bands being adapted to exert a substantial lateral and rearward bracing effect upon the shoulders of the wearer toward the central spine engaging portion, a
 5 waist band extending forward from the waist line of said stayed back member, and hip and abdomen engaging portions extending forward from opposite sides of the lower portion of the said back member and secured at
 10 their upper edges to said waist band.

2. In a garment of the character described, an elongated back member having a shoulder blade engaging portion, diagonal reinforcing crossing straps secured to said elongated back
 15 at the top thereof and having lateral terminals in line with the blade engaging portion of said back, and adjustable arm bands connected at their upper ends with the upper extremity of said shoulder blade engaging portion, adapted to pass forward over the shoulders and backward under the arms and connected at their lower ends with said lateral
 20 terminals in line with said blade engaging portion thereof, said shoulder blade engaging portion and arm bands being adapted to exert a substantial lateral and rearward bracing effect upon the shoulders of the wearer toward the central spine engaging
 25 portion.

3. In a garment of the character described, a back engaging portion extending for a relatively long distance above and below the waist line, arm bands at the upper part of
 30 said back engaging portion adapted to extend over the shoulders and beneath the arms of the wearer, a band extending forwardly from the waist line of said back engaging portion and extending unattached across the waist line of said back engaging portion, and
 35 adapted to engage the waist line of the wearer immediately beneath the ribs, and an abdominal support extending forwardly from each side of said back engaging portion below the waist line, and secured at its upper
 40 edge to said waist engaging band, said waist engaging band being contracted with respect

to said abdominal support to form a circumferential support for said abdominal support for dependently supporting the same from the waist line of the wearer.

4. In a garment of the character described, a back engaging portion extending for a relatively long distance above and below the waist line, arm bands at the upper part of
 50 said back engaging portion adapted to extend over the shoulders and beneath the arms of the wearer, a waist band extending forwardly from the waist line of said back engaging portion, an abdominal support extending forwardly from each side of said
 55 back engaging portion below the waist line and secured at its upper edge to said waist band, said waist band being contracted with respect to said abdominal support, and adjustable strap members connecting said arm
 60 bands and said abdominal support.

5. In a garment of the character described, a one piece back engaging portion extending for a relatively long distance above and below the waist line, arm bands at the upper
 70 part of said back engaging portion adapted to extend over the shoulders and beneath the arms of the wearer, and having their ends attached in spaced relation to said back engaging portion, shoulder engaging straps extending in crossed relation from the respective
 75 upper ends of said arm bands to the opposed respective lower ends thereof, a waist band extending forwardly from the waist line of said back engaging portion, an
 80 abdominal support extending forwardly from each side of said back engaging portion below the waist line and secured at its upper edge to said waist band.

In testimony that I claim the foregoing as
 85 my invention I have signed my name in presence of two subscribing witnesses.

ESTER KARLIN.

Witnesses:

D. LEWIS MATTERN,
 MOE M. WEINBERG,

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