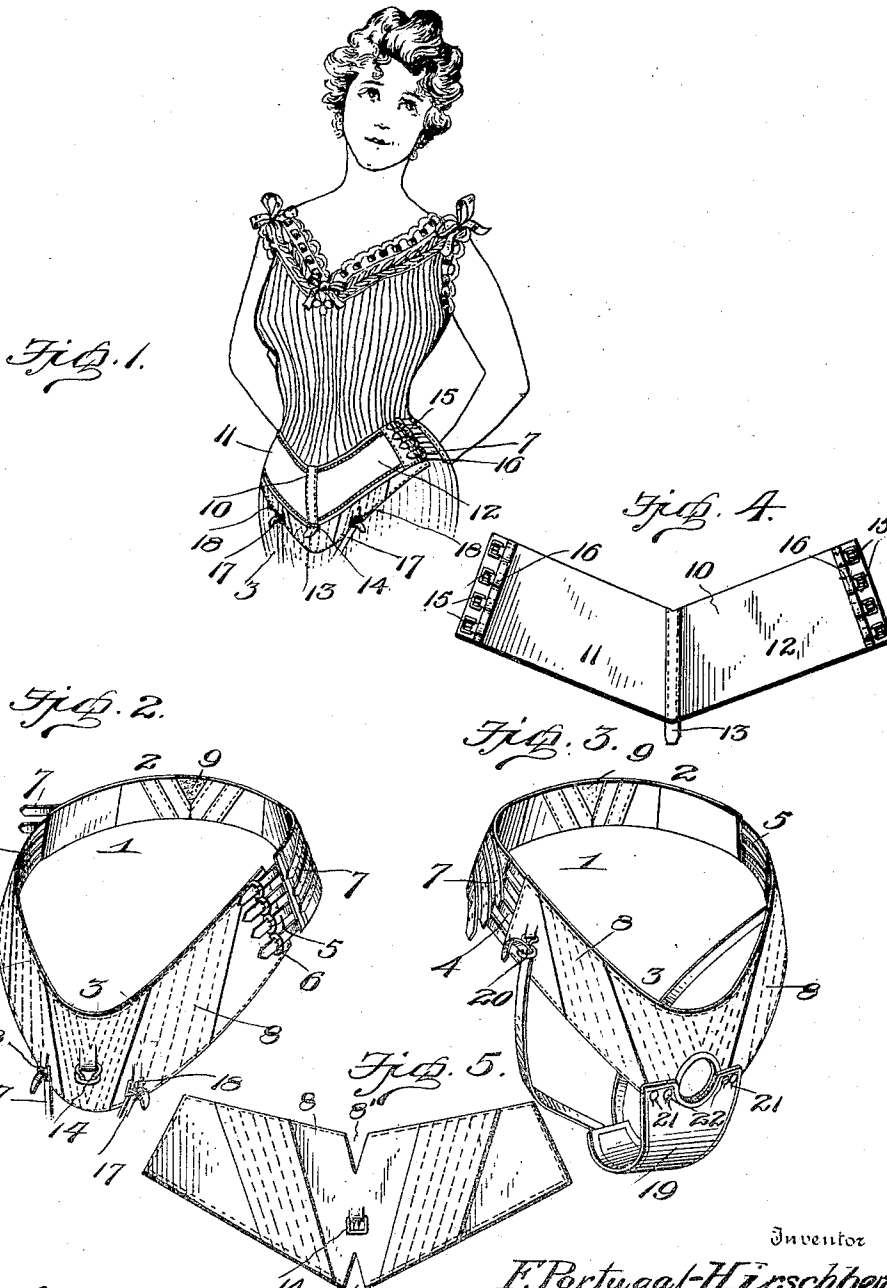


No. 682,270.

F. PORTUGAL-HIRSCHBERG. Patented Sept. 10, 1901.  
ABDOMINAL SUPPORTER.

(Application filed Nov. 15, 1900.)

(No Model.)



Witnesses  
*C. C. Hunt*  
*C. C. Hunt*

Inventor  
*F. Portugal-Hirschberg*  
*A. B. Wilson*  
Attorneys

# UNITED STATES PATENT OFFICE.

FANNY PORTUGAL-HIRSCHBERG, OF CHICAGO, ILLINOIS.

## ABDOMINAL SUPPORTER.

SPECIFICATION forming part of Letters Patent No. 682,270, dated September 10, 1901.

Application filed November 15, 1900. Serial No. 36,599. (No model.)

*To all whom it may concern:*

Be it known that I, FANNY PORTUGAL-HIRSCHBERG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Abdominal Supporters; 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 it appertains to make and use the same.

This invention relates to an improved abdominal supporter and obesity-band, and has for its object the production of an appliance of this character adapted for the use of persons of either sex and embodying certain peculiarities and advantages in construction and operation which will be hereinafter fully described and specifically claimed.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing the appliance as employed in practice for treating obesity in either sex. Fig. 2 is a perspective view of the device as employed as a supporter. Fig. 3 is a similar view showing the use of a suspensory attachment. Fig. 4 is a detail view of the obesity-band detached. Fig. 5 is a view of a modified form of front section for the supporting-band adapted for abnormal figures.

Referring now more particularly to the drawings, the numeral 1 represents the abnormal supporter proper, comprising a band formed of front and back sections 2 and 3, adapted to extend, respectively, across the lower portion of the abdomen and across the back immediately below the waist-line. The ends of the said front and back sections are connected at one side of the band by elastic straps 4, sewed or otherwise secured thereto, and the opposite ends of said sections at the other side of the band are adapted to be connected by elastic straps 5, sewed to the back section and adapted to engage buckles 6 on the front section, whereby the band may be adjusted to snugly fit the parts and exert an elastic bearing action. In addition to the elastic straps 4 and 5 inelastic straps 7 are provided on the back section for the attachment of the obesity-band, hereinafter described. The front section 2

of the band is comparatively narrow and of segmental form, having its end portions upwardly curved or divergent and reinforced by diagonal outer reinforcing-strips 8. It is made of some suitable inelastic material—such as sateen, fine drilling, or coutil—and is cut on the bias of the material, so as to secure the requisite curvature and adapt it to yield readily to the shape of the lower portion of the abdomen. It will be noted that by curving the said front section of the band in this manner it is adapted to fit perfectly about the lower portion of the abdomen below the point of greatest expansion and supports the latter by exerting an upward pressure thereon instead of an inward pressure, by which all liability of displacement of the internal organs is prevented. The rear section 3 of the band is also of segmental form, having its ends upwardly curved, and is provided at the center with an interposed elastic gore or gusset 9, which adapts it to conform to the contour of the back and to yield freely under the movements of the body. Fig. 1 of the drawings shows the band applied as in practice, from which it will be seen that the back section 3 extends across the small of the back, with its ends curving over and around the hips to the front, and that the front section curves downwardly from the hips toward the center of said section and bears upon the lower portion of the abdomen. The band is thus adapted to support and strengthen the back in line with the kidneys and to exert an upward pressure on the abdomen, thereby supporting the abdomen in the most effective manner and without exerting an inward pressure thereon and also without exerting undue pressure on the back, which is of prime importance in certain cases. All prior abdominal supporters with which I am familiar simply when applied form a ring or circle and support the abdomen by pressing inwardly against it. This is objectionable in that the pressure exerted is liable to injure or displace the intestines and other internal organs by either crowding them upwardly or downwardly, and at the same time reduction of the lower portion of the abdomen is attended by an increase in girth at the upper portion thereof, due to upward displacement. Usually the bands are made of a width

to cover the entire portion of the body from the waist down to the lower portion of the abdomen, making the supporter heavy, cumbersome, and uncomfortable to wear, preventing the wearing of corsets, and distorting the figure of the wearer. At the same time the supporting action of the lower portion of the band is to a great extent counteracted by the inward and downward pressure of the upper portion of the band, whereby the muscles are weakened instead of being relieved and allowed to recover their normal strength. Where, on the other hand, corsets with abdominal bands are employed, the requisite amount of pressure and the application of the pressure at the proper angle to avoid the objections set forth cannot be secured for reasons well known to those versed in the art. By the use of my invention these objections are entirely avoided, as the front section of the band presses upward on the abdomen, thus supporting it, while leaving its upper portion free from pressure, so as to relieve the muscles and permit them to have full freedom of movement and to recover their normal strength. A further advantage is that the weight of the abdomen is suspended from the hips and not from the back, obviating the necessity of inward pressure on the abdomen or small of the back. The device is also light in weight, comfortable at all times, does not distort the body, and does not interfere with the wearing of corsets. It is of great value in certain uterine disorders as a support for the weakened organs, as it holds the organs in proper position without undue pressure. It is also of great value in the treatment of obesity coupled with disorders to which men are peculiarly subject, as by its use the scrotum, testicles, and abdomen may be simultaneously supported without pressing upon the small of the back in line with the scrotal nerves.

In treating obesity an approximately V-shaped band 10 is employed in connection with the supporter. This band is composed of two upwardly-diverging elastic portions 11 and 12, connected at their inner ends or at the center of the band. From the lower edge of this central portion a tab 13 projects downwardly and is adapted to engage a buckle 14 on the front section of the supporter to hold said band in position. Each elastic portion of the band is provided at its free end with a series of buckles 15 to receive the straps 7 on the back section of the supporter and loops 16 to confine the projecting ends of said straps. By adjusting these straps the band may be caused to bear with greater or less force. By reference to Fig. 1 it will be seen that the obesity-band is supported above the lower edge of the supporter, so as to bear upon the abdomen at a higher point. The elastic action of the obesity-band adapts it to conform to the contour of the body and to exert a pressure independent of the supporter and

which may be varied as desired. Elastic hip-straps 17 are employed whether the obesity-band is used or not to hold the supporter down in proper position. These straps may be applied in any approved manner, but in the present instance are shown sewed at one end to the back section 3 and engaged at their free ends with buckles 18 on the front section 2.

For male use the supporter may have attached thereto a scrotal pouch or suspensory 19, provided with hip-straps to engage buckles 20 on the supporter. The pouch may be secured in any preferred way, but is preferably provided with buttonholes 21 to receive buttons 22 on the supporter. The manner of employing this attachment will be readily understood.

For treating persons having abnormal figures I have provided a modified form of front section for the supporting-band, which may be adjusted to suit the form of the patient. This varies from the form of front section heretofore described in being made somewhat deeper and broader and in being provided in its upper and lower edges at the center with darts or V-shaped openings 8', which adapt the band to be fitted to suit the figure in a manner that will be readily understood. Fig. 5 shows the pattern of this modified form of front band-section.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A supporter of the character described, comprising comparatively narrow front and back sections segmentally curved to extend across the abdomen below the point of greatest expansion and across the back immediately below the waist-line, and adapted to curve over and rest upon the hip-bones, the front section being cut on the bias of the material and provided with diagonal reinforcing-strips extending in reverse directions from the center, and the back section having a central interposed elastic gore, fastening means for uniting the sections, and hip-straps, substantially as described.

2. A supporter of the character described, comprising a supporting-band composed of segmentally-curved front and back sections, the front section being adapted to bear upon the lower portion of the abdomen, elastic connections between said sections, an elastic substantially V-shaped obesity-band connected centrally to and adapted to lie upon the outer surface of said front section and to exert an independent supporting pressure at a higher point on the abdomen, and inelastic connections between the bands, substantially as described.

3. An abdominal supporter and obesity-band, comprising a segmentally-curved back supporting-section having a central elastic gore, a similarly-curved front supporting-section adapted to exert an upward supporting

pressure on the lower portion of the abdomen,  
elastic straps for connecting said sections, a  
substantially V-shaped elastic obesity-band  
connected centrally to said front supporting-  
5 section and adapted to bear at a higher point  
upon the abdomen, and straps connected to  
said rear supporting-section for securing the  
ends of the obesity-band thereto, said straps  
being arranged at an upward diagonal angle

to hold the obesity-band properly supported, 10  
substantially as set forth.

In testimony whereof I have hereunto set  
my hand in presence of two subscribing wit-  
nesses.

FANNY PORTUGAL-HIRSCHBERG.

Witnesses:

L. LÜTKEN,

WILLIAM PETTIS.