Feb. 23, 1926. 1,574,010

J. WEST

SUPPORT

Filed Feb. 9, 1923

Fig. 1.

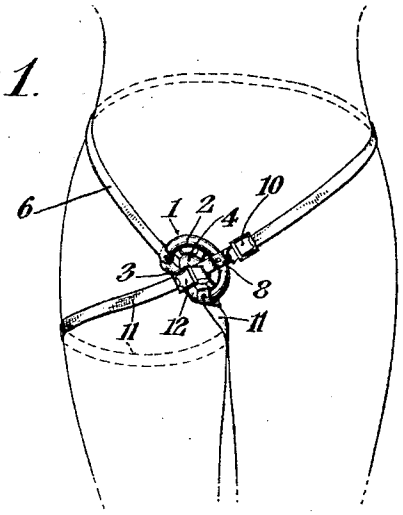


Fig. 2.

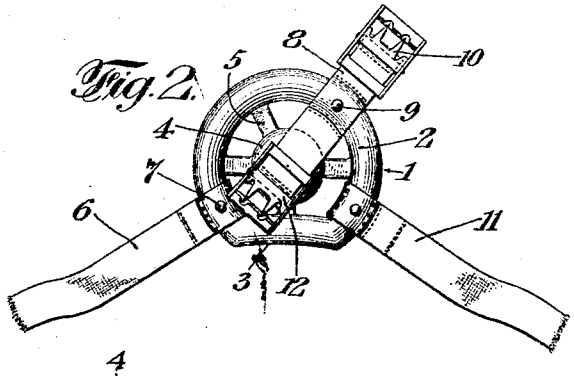
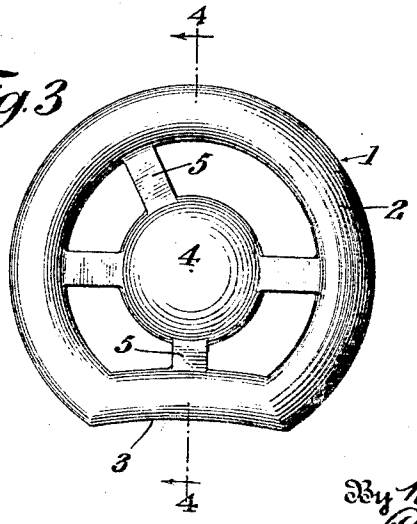


Fig. 3



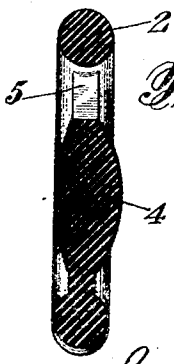


Fig. 4.

Inventor
James West,
By his Attorneys
Pindle, Wright, Reed & Beem.

Patented Feb. 23, 1926. 1,574,010

UNITED STATES PATENT OFFICE.

JAMES WEST, OF BALSTON SPA, NEW YORK.

SUPPORT.

Application filed February 9, 1923. Serial No. 617,950.

To all whom it may concern:

Be it known that I, JAMES WEST, a citizen of the United States, a resident of Balston Spa, in the county of Saratoga and State of New York, have invented a certain new and useful Support, of which the following is a specification.

This invention relates to improvements in supports, trusses, and the like, and more particularly to such devices used for the treatment and support of hernia or rupture.

An object of this invention is the provision of such a device which is simple and strong in construction, light and durable as well as comfortable in use, ventilated and readily cleaned, easily applied and adjusted according to the comfort and condition of the wearer.

In addition to these as well as other detailed objects and advantages, my invention provides a device which acts most efficiently and comfortably to support the hernia without undue pressure and without the use of braces, corsets, pressure pads, and the like, whereby there is no tendency to enlarge the rupture at all, but the parts are so constructed and arranged as to reinforce the natural muscle support and acts in the same manner as the wearer would use his hand.

To the accomplishment of the foregoing and such other objects as may hereinafter appear, my invention consists in the construction, combination, and arrangement of parts hereinafter described and then sought to be defined in the appended claims, reference being made to the accompanying drawing forming a part hereof and which shows for the purpose of illustrative disclosure a preferred embodiment of my invention, it being expressly understood however that various changes may be made in practice within the scope of the claims without digressing from my inventive idea.

Figure 1 is a view showing a right side device constructed according to my invention in use.

Figure 2 is a front elevation of the device showing the tapes or straps attached.

Figure 3 is a full sized elevation of the support itself.

Figure 4 is a vertical cross section of the same taken on line 4—4 of Figure 3.

In the drawing, the numeral 1 designates the supporting device proper, which is in the form of an annulus or ring 2 having a flattened portion or segment 3. This annulus is preferably circular in cross section. A holding member or button 4 is located centrally in said annulus and is connected thereto by a plurality of radial arms or spokes 5. The holding member or button 4 is preferably curved or convex on both of its surfaces and the arms or spokes 5 are flexible and resilient and are preferably less in thickness than both the annulus 2 and the holding member or button 4. As a matter of fact, it is preferable to make the entire member 1 of a suitable flexible and resilient material, such as rubber or the like, whereby it may be molded or pressed in one piece, and also have the requisite characteristics of strength, softness, flexibility, and resilience.

In order to properly hold and support the device in position, I provide a novel and effective form of suspension, which includes the supporting strap or tape 6 which is secured to the annulus or ring 2 as at 7 adjacent one end of the flattened portion or segment 3 and is adapted to extend upwardly and around the waist of the wearer and to be adjustably secured to the annulus or ring 2 substantially diametrically opposite its permanent point of connection. One form of affording this adjustable connection is by means of the tape or strap 8 secured to annulus or ring 2 as at 9 having a buckle or catch 10 at one end to adjustably receive the end portion of the tape or strap 6. By this method of suspension and support, the device is pulled in an upward direction from both sides due to connections 7 and 9, it being understood, that as shown, the flattened portion or segment 3 fits against the inside of the limb between the limb and the abdomen, the device as a whole being in an inclined position. Therefore the tape or strap 6 being around the waist and connected thereto at opposite sides the pull is upward and inward at all times, just like the natural action of the hand of the wearer.

An additional holding and positioning medium may be necessary and for this purpose I provide the tape or strap 11 secured to the annulus 2 at the other side of the flattened portion 3, this being the lower side when in use. This tape or strap 11 is passed around the upper portion of the limb, as shown, and is adjustably connected to the annulus 2 by buckle or clasp 12, which is shown as secured to the oposite end of the tape or strap 8. This part of the suspension

operates to hold the device in proper position so that the upward pull of the tape or strap 6 does not displace it, and also holds the lower part of the device in against the body in proper position.

When in use the holding member or button 4 is positioned opposite the rupture with the segment 3 of the annulus 2 against the limb and after proper adjustment the hernia will be supported and the surrounding muscles reinforced and supported by the ring or annulus 2. Most of the supporting pressure is taken up by the ring or annulus and only sufficient pressure is transmitted to the holding member or button to properly suport the hernia, this being due to the provision of the flexible and resilient radial arms or spokes 5 which permit a readily yielding action between the annulus 2 and the button 4, and provide an elastic pressure on the button. The device as a whole assumes a cupped or concave shape and the annulus presses inwardly and toward the center whereby there is a direct tendency at all times to close the rupture.

It is therefore seen that I have provided a device which is efficient at all times day or night to support the hernia without discomfort or unpleasant sensation, the device being light, durable, soft, pliable, and adjustable, readily cleaned and always ventilated and permitting the access of air to the part of the body to which it is applied. It may also be used after abdominal operations of various kinds, in maternity cases, and in fact whenever necessary to provide support for the abdomen or any part thereof.

It is to be understood that while I have shown and described a preferred form of suspension, other forms may be used, as well as other methods of attaching the same, that other suitable materials than those specified for various parts may be used, and that I am not to be restricted to shape, design, and dimension as shown and described except as limited by the claims.

It is to be noted that while I have referred to segment 3 as flattened or straight, it is preferably formed on a slight curve so that the lower edge thereof is slightly concave to better fit the parts with which it comes in contact. While the device illustrated is equipped as a right side device, it may be changed to a left side device by changing the points of attachment of the suspension mediums.

What I claim is:—

1. As an article of manufacture, a support formed of resilient material such as rubber having a single annular member, a central holding member disposed within the annular member and of a size so as to be substantially spaced therefrom and a plurality of radial yielding and resilient members connecting said annular member and said holding member formed in one piece with said members, said yielding and resilient members being spaced apart substantial distances and being less in thickness than the other parts of said support.

2. A device of the character described, including in combination, a support formed in one piece of yielding material such as rubber and comprising an annular member, a holding member in the form of a button less in diameter than the annular member centrally located therein, and a plurality of yielding members connecting said annular member and said holding member, said yielding members being spaced apart substantial distances and being less in thickness than the other parts of said support and suspension means connected to said annular member in the spaces between said yielding members.

In testimony that I claim the foregoing, I have hereunto set my hand this 2nd day of February, 1923.

JAMES WEST.