Feb. 26, 1952 F. GARDUNO 2,587,307

SAFETY BINDER AND SUPPORT

Filed April 13, 1948 2 SHEETS—SHEET 1

Fig. 1.

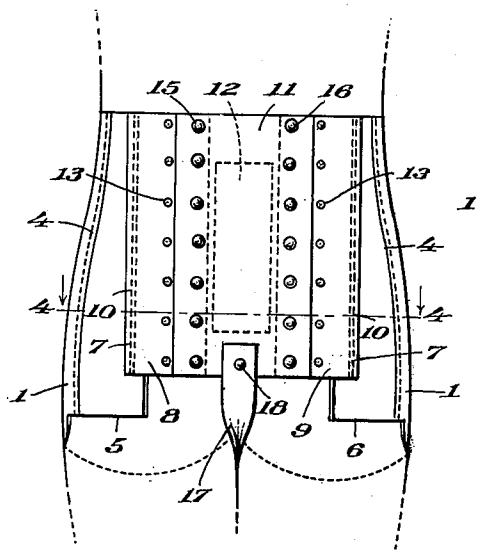


Fig. 2.

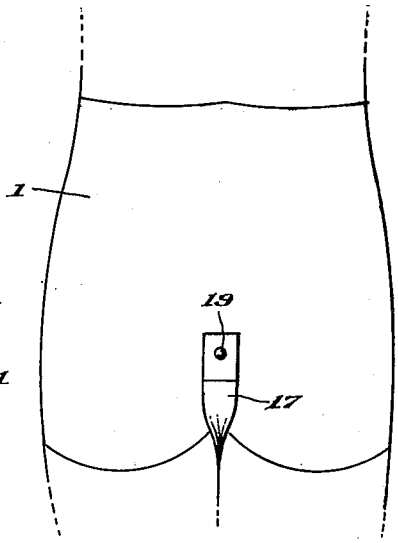
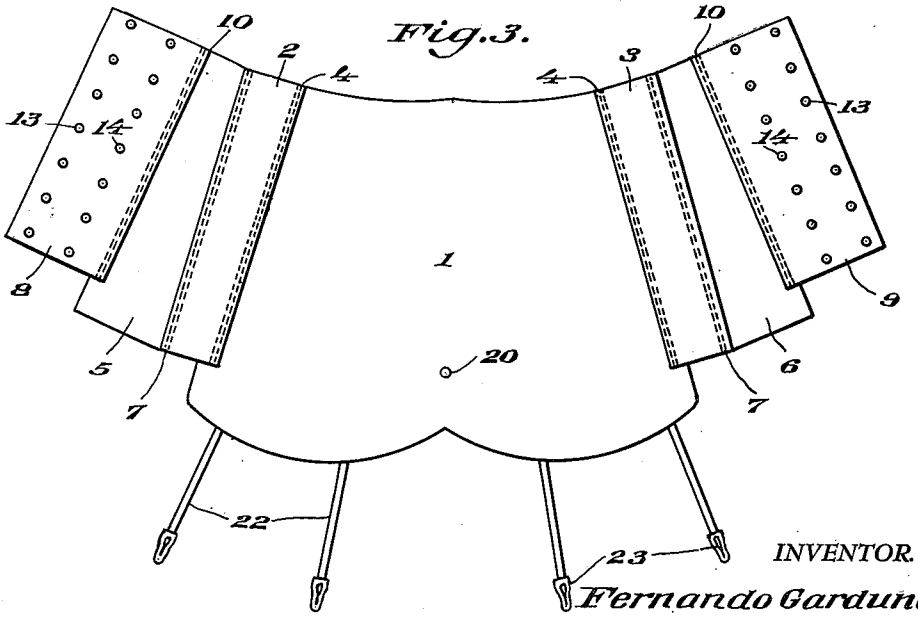


Fig. 3.



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Fig. 4

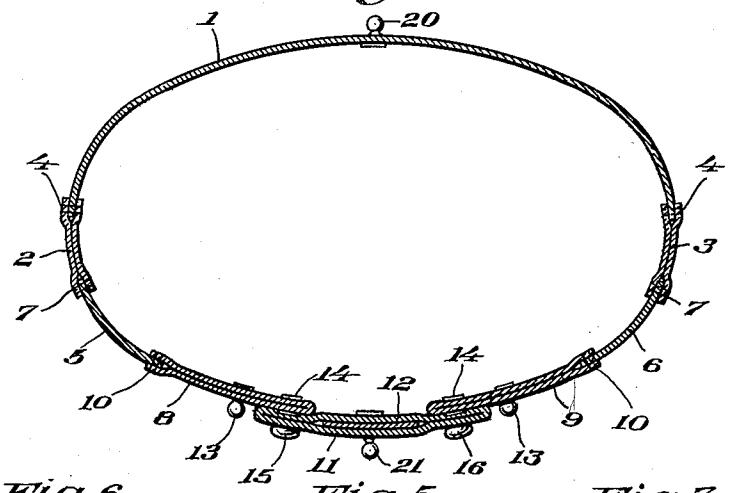


Fig. 8.

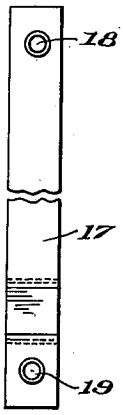


Fig. 6.

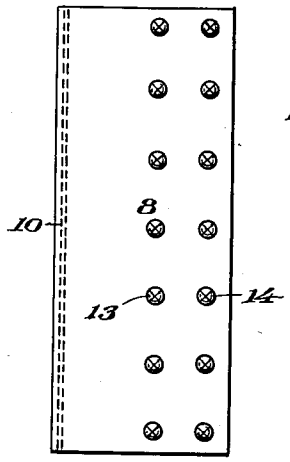


Fig. 5.

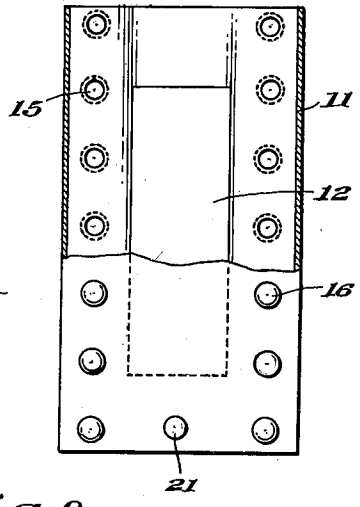


Fig. 7.

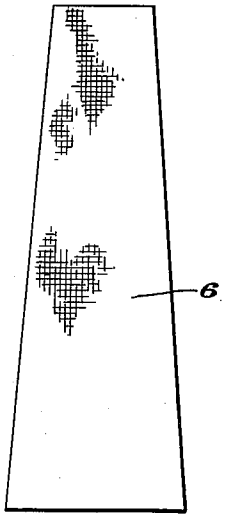
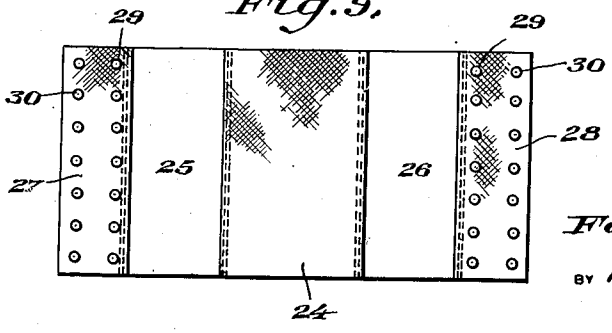


Fig. 9.



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2,587,307

UNITED STATES PATENT OFFICE

2,587,307

SAFETY BINDER AND SUPPORT

Fernando Garduno, Los Angeles, Calif.

Application April 13, 1948, Serial No. 20,620

1 Claim. (Cl. 2—41)

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My present invention relates to the general class of wearing apparel of the abdominal supporting type, and more specifically to an improved safety binder and support which while well adapted for use by others, is especially designed for women's wear in the protection of the umbilical area, for aiding in maintaining a stronger abdominal wall and correcting undesirable conditions of other organs, and particularly for maternity cases as a safety and bracing appliance. The primary object of the invention is the provision of binder or support of this nature that is form-fitting, adjustable and extensible to various sizes and shapes; and which may readily be applied, worn with comfort to the wearer, and readily preserved in proper sanitary condition.

The invention consists essentially in certain novel features of construction and combinations and arrangements of parts as will hereinafter be described and more particularly set forth in the appended claim.

In the accompanying drawings I have illustrated a complete example of a physical embodiment of my invention wherein the parts are combined and arranged in accord with one mode I have devised for the practical application of the principles of my invention. It will however be understood that changes and alterations are contemplated and may be made in these exemplifying drawings and structures, within the scope of my claim, without departing from the principles of the invention.

Figure 1 is a front view and Figure 2 is a rear view showing the use of the binder and supporter of my invention.

Figure 3 is an outspread view of the form-fitting apparel, omitting the front connector or detachable fastener-panel.

Figure 4 shows the supporter in the form of a belt, with parts, in section, and with the front attaching panel uniting the belt ends at the front.

Figure 5 is an enlarged view, partly in section, of the braced closure or fastening panel for uniting the adjoining ends of the belt or compressor.

Figure 6 is a view of one of the dual front or end panels, detached; and Figure 7 is a view of one of the elastic darts, detached.

Figure 8 illustrates the detachable tie-down or crotch strap; and

Figure 9 is a plan view, on reduced scale, of one of the interchangeable and adjustable connectors or fasteners of the supporting and bracing belt.

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In fashioning the flexible and form-fitting supporter I employ as a main section a body 1 of rather heavy material, as canvas, that is conformable to the back and sides of the wearer, and double-thick hip-inserts 2 and 3 of approximate rectangular shape are stitched, as at 4, 4, to the side edges of the body 1.

Complementary elastic darts, or tapered strips, as 5 and 6 are stitched at their respective edges within the two-fold edges of the hip-inserts, and the stitches 7 rigidly connect the inserts and darts, to provide smooth joints.

The belt or compressor terminates in two double thick end panels 8 and 9 of suitable fabric, and these end panels are united with the darts by rows of stitches as 10, 10.

After the supporting belt has been applied to the wearer, one of a set of interchangeable and adjustable connectors or fasteners, as shown in Figs. 1, 4, 5, and 9, is employed for uniting the two end panels 8 and 9.

In Figs. 1, 4, and 5, the fastening panel or connector 11 is made of a two-fold fabric suitable for the purpose, and it is stitched, sewed, or otherwise secured to form an interior pocket or container for a resilient bracing plate 12 of sheet metal, or other elastic and resilient material that is non-corrosive.

Quick-detachable fastening means are provided for attaching the front panel or connector to the compressor belt, and for this purpose the dual end panels 8 and 9 are each equipped with two rows or series of button-fasteners 13 and 14. The connector, or fastening panel is also equipped with two spaced rows or series of socket-fasteners 15 and 16, that are adapted to snap over the button-fasteners of the end-panels for fastening the supporting belt in place, and with equal facility these fastening devices may be detached for adjustment in the length of the supporter, as well as for removal of the supporter from the wearer.

The supporter, in place, may be tied down, or retained in proper position by means of a crotch-strap 17 that is provided with end-fasteners 18 and 19, and these fasteners 18 and 19 may readily be snapped over complementary fastening members, 20 on the exterior side of the body 1 and 21 on the fastening panel 11.

As indicated in Fig. 3, the body portion 1 may be equipped with usual garters, as 22 and the garters are provided with customary fasteners 23 for attachment to the hosiery.

In Fig. 9 an interchangeable connector or front panel is illustrated for use in maternity cases, in lengthening the size of the supporter, and

adapting it to different body girths of a wearer. As here shown, the connector or belt fastener includes a central panel 24 of cloth or other suitable fabric, to which are attached two double elastic panels 25 and 26, and two end panels 27 and 28, preferably of cloth are stitched to the elastic panels, to provide a strong and substantial connector and brace. The end panels 27 and 28, are each provided with two spaced rows of snap fasteners 29 and 30 of a type suitable for co-action with a selected pair of fasteners on the end panels 8 and 9 of the supporter, and it will be apparent that the desired fasteners of the connector may be coupled with the selected fasteners of the end-panels in adjusting the supporter with its bracing connector to different sizes of abdomens. Thus the braced connector of Fig. 9 may be substituted for the fastening panel 11 in maternity cases, and the size of the supporter as a whole may be increased as desired and when necessary.

The interchangeable connector and brace is especially useful in providing a mechanical wall for reinforcing a tired or extended abdominal wall, enhancing the comfort of the wearer, and in minimizing harmful effects of surgical operations.

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

An abdominal supporter comprising a flexible body portion for conforming to the shape of the back and sides of the wearer, a pair of reinforced hip inserts each secured along a vertical side edge thereof to vertical side edges of said body portion, a tapered elastic dart connected to the other side edge of each of said hip inserts, an end panel connected to each of said darts and provided with fastening means thereon, a central panel having complementary fastening means for adjustably securing the central panel to the end panels, a crotch strap having one end detachably connected to said body portion and its other end detachably connected to said central panel, said central panel being provided with a pocket, and a resilient bracing plate positioned in said pocket.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,636,516	Kops	July 19, 1927
1,993,671	Kahn	Mar. 5, 1935
2,104,277	Schopbach et al.	Jan. 4, 1938
2,442,225	Versoy	May 25, 1948

FOREIGN PATENTS

Number	Country	Date
815,443	France	Apr. 12, 1937