April 20, 1965 T. F. BORN 3,179,109

BRASSIERE STABILIZATION

Filed Feb. 2, 1962

FIG. 1.

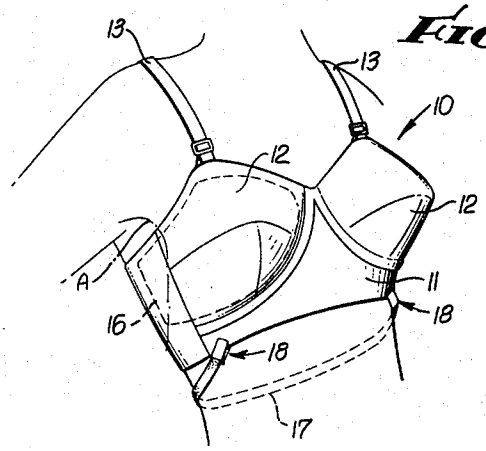


FIG. 2.

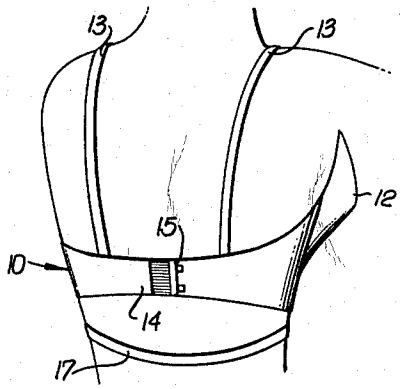
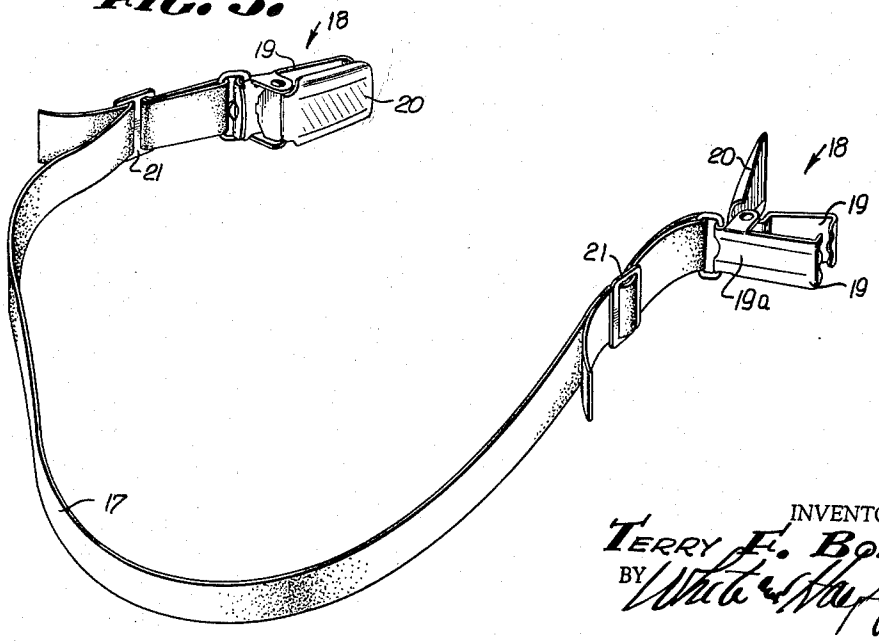


FIG. 3.



INVENTOR.
TERRY F. BORN
BY Walter & Haupfleer
ATTORNEYS.

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BRASSIERE STABILIZATION

Terry F. Born, 3070 Lake Hollywood Drive, Los Angeles, Calif.

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8 Claims. (Cl. 128—507)

This invention has to do generally with the problem of assuring maintenance in proper position as worn, of brassieres conventional in the respects of comprising connected breast cups held to the wearer by a tensionable back strap. More particularly, the problem dealt with by the invention is that of maintaining in proper position, brassieres worn by women who have experienced radical mastectomy in the removal of one or both breasts, and where the brassieres are designed suitable for reception of prosthesis which formally replace the body tissues excised by surgery.

Such brassieres have been made to contain artificial busts made of plastic, foam or like materials, designed to give normal shape to the wearer's body. However, since ordinarily the breast itself is a dominant factor in maintaining the brassiere in proper position, in the absence of the breast the brassiere tends to shift upward, downward or sideways depending upon the body movements. Accordingly, mere contouring of a brassiere under such conditions, presents no solution to the problem of stabilizing it on the wearer.

The present invention affords an extremely simple and practical solution of the problem, by virtue of the discovery that in the manner later explained, the application of forces to lower portions of the brassiere, elastically transmitted about the back of the wearer below the usual back strap, will assure maintenance of the brassiere properly positioned during all normal body movements.

The method contemplated by the invention involves applying to spaced locations on the brassiere below the cups, the terminals of an auxiliary strap which is elastically tensioned about the back of the wearer so that the strap transmits to the brassiere body, embracing forces at locations most effective for stabilization. Preferably, and most practicably, the auxiliary strap is provided as a separate facility, useable with different brassieres, and for this purpose is made of strip elastic having terminal fasteners, preferably clips, which may be secured to the brassiere at any of various locations to suit the requirements of the wearer.

Particularly contemplated is an auxiliary strap made of surgical elastic fabric having felt-like surface texture and smoothness to preclude possibilities of irritation that would result from the use of more conventional elastic fabrics presenting rougher surfaces. Greater adaptability of the strap to the wearer's measurements, is given by providing for length adjustments between the fastener terminals.

All the above mentioned as well as additional features and objects of the invention will be more fully understood from the following detailed description of an illustrative embodiment shown by the accompanying drawing, in which:

FIG. 1 is a front perspective illustrative of a conventional form of brassiere equipped with a prosthesis, together with the attached stabilizing strap;

FIG. 2 shows the assembly of FIG. 1 as viewed from the rear; and

FIG. 3 is a view showing the stabilizing strap with its terminal clips.

In all general aspects, the brassiere, generally indicated at **10** is to be regarded merely as illustrative of various types and forms of conventional brassieres, to the stabilization of which the invention is applicable.

Merely as illustrative, the brassiere is shown to comprise a body portion **11** which interconnects the breast cups **12**, it being understood that the body portion in some styles and designs may terminate at or close to the bottom peripheries of the cups. The brassiere illustrated, is shown to include shoulder straps **13** and a tensional back strap **14** having a conventional interconnection at **15**. Assuming the brassiere to be worn by a person having one breast removed, the cup may contain a suitable prosthesis, such as a breast-shaped insert of foam rubber or the like, indicated by the broken lines at **16**.

Absent the breast which would itself tend in the normal manner to stabilize the brassiere, in and where tissues have been removed in the general area indicated by the broken lines at A, the brassiere situations such as I have assumed and illustrated, may tend to shift upward, downward, or sideways, depending on the movements of the wearer, and such shifting movements will occur notwithstanding tensioning of the back strap **14** and the presence of the shoulder straps **13**.

In accordance with the invention, the brassiere is stabilized by the application about the back of the wearer and at spaced locations along the lower portion or bottom edges of the brassiere, of a longitudinally elastic strap **17** carrying at its terminals, suitable attachment means which will permit easy and secure connection of the strap to the brassiere at any of different locations selectable in accordance with the requirements of the user. I prefer to use as the terminal attaching means, readily connectable and removable clips, generally indicated at **18**, of the known form comprising a pair of jaws **19** which may be pressed and held together by the pivoted retainer **20**. The strap **17** may be adjusted to length by a pair of the usual buckle-shaped slide retainers **21** provided toward both ends of the strap near the terminal clips.

It is important that the strap be worn, particularly when under tension, with complete comfort and absence of irritation that might result from a rough or irregular surface texture of the strap. Such comfort is assured by making the strap of what is known as surgical elastic, which is made from rubber strands woven in an essentially felt-like fabric which is smooth and relatively soft at the surface.

In use, the wearer has only to apply the strap **17** as illustrated in FIGS. 1 and 2, attaching the clips **18** at locations which will tension and agreeably exert body embracing force transmitted to the wearer's body along the front lower extent of the brassiere. The effect of the strap tension is to confine the brassiere to the body both independently of and in conjunction with the back strap **14**, the position and angularity of the auxiliary strap **17** being such as to exert terminal pull both somewhat downwardly and also in the general transverse direction of the brassiere to effectively resist upward or sideways displacement. The brassiere is otherwise confined by the forces transmitted by the back strap **14** which, together with the shoulder straps **13**, are resistant to any tendencies of the auxiliary strap to unduly shift the brassiere downwardly.

As the strap **17** is worn, jaws **19***a* contact the wearer and have surfaces so smooth as to preclude irritation of sensitive skin. Preferably the adjustments **21** contact the wearer with the strap terminals at the inside, thus to minimize any appearance of protrusions through the wearer's garments. Thus the auxiliary strap may be worn with complete comfort and concealment.

I claim:

1. In combination with a brassiere comprising front interconnected cups and a back strap carrying terminal interengageable fasteners and tensionable about the back of the wearer at substantially the elevation of the lower

front portion of the brassiere, an auxiliary elastic strap adapted to be tensioned about the back of the wearer independently of and spaced below said back strap, and means attaching the terminals of said auxiliary strap to variably spaced locations along the brassiere front below the cups.

2. The combination of claim 1, in which said attaching means are clips releasably attachable to the brassiere at any of different locations according to the requirements of the wearer.

3. The combination of claim 2, in which said auxiliary strap is substantially narrower than said back strap.

4. The combination of claim 3, in which said auxiliary back strap is made of surgical elastic fabric having felt-like smoothness.

5. The combination of claim 2, in which said auxiliary strap includes length adjusting means between said clips.

6. The combination of claim 2, in which said brassiere has shoulder straps.

7. The combination of claim 2, in which one of the cups comprises a breast-shaped prosthesis.

8. The combination of claim 1, in which one of the cups comprises a breast-shaped prosthesis.

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LOUIS R. PRINCE, *Primary Examiner.*
ADELE M. EAGER, *Examiner.*