April 17, 1956 R. MONTESANO 2,742,036

CONTOUR BELT FOR MASSAGE VIBRATOR

Filed March 15, 1955

Fig. 1.

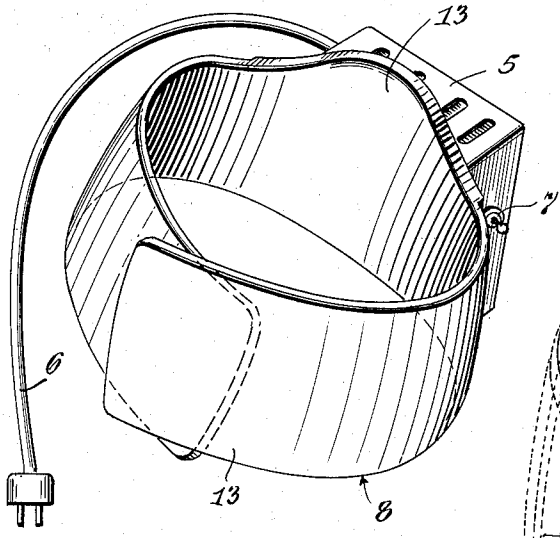


Fig. 2.

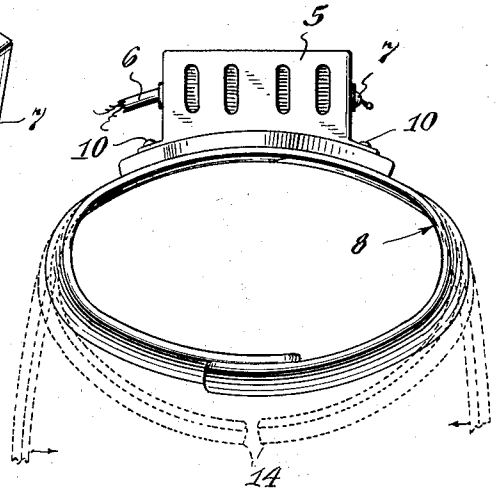


Fig. 4.

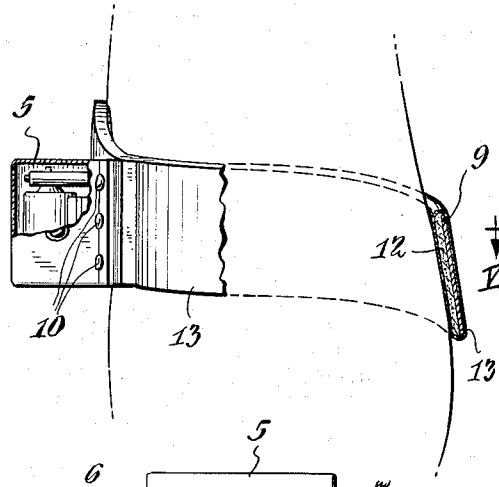
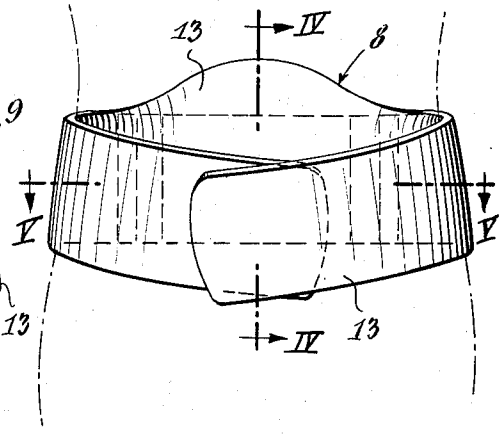


Fig. 3.



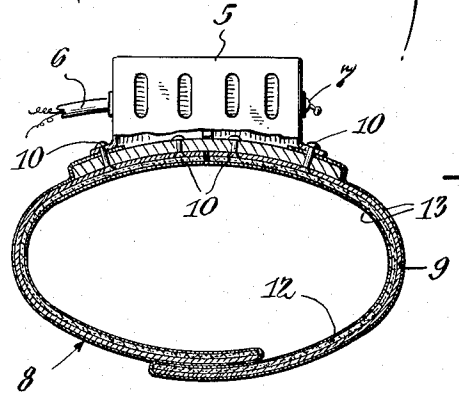


Fig. 5.

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CONTOUR BELT FOR MASSAGE VIBRATOR

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5 Claims. (Cl. 128—36)

The present invention relates to massage vibrators and particularly such devices of a readily portable nature that can be used by individuals in their homes and on substantially any part of their body.

Massage vibrators of this general type are presently known to the art and their use is becoming more and more prevalent for toning of muscles, relief of nervous strain and stimulation of the circulatory system of the human body. The difficulty with devices of this type at present known to the art is that they are of a cumbersome nature and do not conform closely enough to the contour of the human body nor especially compensate for persons of different sizes and weight.

It is accordingly the primary object of the present invention to provide a massage vibrator of light weight which readily conforms to the contours of the human body regardless of the weight of the user.

Another object of the present invention is the provision of a massage vibrator which is provided with an inherent spring-tensioned belt automatically conforming to the contour of the user's body so as to massage the greatest possible area of the body during operation of the vibrator.

A further object of the present invention is the provision of a massage vibrator having a spring-tensioned adjustable belt which is so shaped that it will readily conform to the body of a teen-age child and to a heavy-weighing adult and yet contact the greatest possible area of the body to which it is applied.

Still further objects of the present invention will become obvious to those skilled in the art by reference to the accompanying drawing wherein:

Figure 1 is a perspective view of the massage vibrator of the present invention,

Fig. 2 is a top view of the massage vibrator of the present invention and showing various positions of the automatically adjustable belt portion thereof,

Fig. 3 is a rear view showing the massage vibrator of the present invention as applied to the waist of a user thereof,

Fig. 4 is a cross-sectional view taken on the line IV—IV of Fig. 3 with portions of the vibrator broken away to better illustrate the device, and

Fig. 5 is a cross-sectional view taken on the line V—V of Fig. 3.

Referring now to the drawing in detail as illustrative of one embodiment which the massage vibrator of the present invention may take, it will be noted that such vibrator comprises a motor driven vibrator element **5** readily connectable to the usual convenience outlet as found in the home by means of the extension cord and plug **6** with starting of the motor controlled by operation of a switch **7**.

Secured to the vibrator element **5** is an inherent spring-tensioned belt **8**. By reference more particularly to Fig. 5 it will be noted that this belt is shown as formed of relatively thin spring-steel ribbon **9** riveted at **10**, or

otherwise permanently and rigidly connected to the vibrator element **5**. Such spring-steel ribbon **9** may be in two pieces of substantially U-shaped configuration with opposing free-ends of the U's overlapping or a single one-piece spring-steel ribbon **9** may be utilized which would then be of substantially oval-shape with overlapping free ends in the same manner as shown in Figs. 1, 2, 3 and 5. Regardless of whether of one or two pieces, the spring-steel ribbon **9** is provided with a soft padding of felt or the like **12** in contact with its surfaces and edges which is held in place by an outer covering of soft leather or plastic **13**, comfortable when contacting the skin of a user.

From the several figures it will be apparent that when not in use the free opposing ends of the spring-tensioned belt **8** overlap as shown thus forming an oval whose minor diameter may be approximately equal to the average human thigh. When it is desired to utilize the massage vibrator of the present invention, one merely opens the oval by springing back the overlapping ends to the extreme open position, as shown by the fartherest removed dotted lines in Fig. 2, and passing the belt around the sides of the body and thereafter releasing the opposing force. This automatically causes the spring-tensioned belt **8** to again move, in the direction indicated by the small arrows in Fig. 2, toward its normal end-overlapping position. If the user is of stout build about the waist, then perchance the opposing ends of the belt **8** will not quite overlap, such as shown by the dotted lines at **14** in Fig. 2.

On the other hand if the user is not too stout then the opposing free ends of the belt **8** will again slightly overlap even when around the waist of a user as shown particularly in Fig. 3. It will be significantly noted, however, that, whether the free opposing ends do not quite meet as at **14**, or overlap as shown in Fig. 3, in either event the belt is so "naturally" shaped, due to its conical or tapering contour since the upper edge, as viewed from Figs. 1 to 4, is of slightly less diameter than the lower edge, that its greatest possible surface area, from one end thereof to the other, gently contacts the body of the user so that vibrations are transmitted directly thereto, with an entire absence of any "clamping" due to spring tensioned wings leaving gaps between contacting areas of the skin. Since the belt **8** thus firmly but gently engages the body of the user there is not the slightest discomfort during the most prolonged application. However, prolonged applications are definitely not necessary because of the increased skin area subjected to treatment during each application, which has not been possible with massage vibrators of the prior art.

It is also to be understood that while I have shown my massage vibrator herein as having a belt formed of padded spring-steel ribbon it is equally feasible to make the belt **8** of a spring-steel wire frame likewise padded as shown but such modified structure would not be as efficient in transmitting vibrations to as great a surface area of the users skin as the spring-steel ribbon of my preferred embodiment as herein shown and described.

It should thus be obvious to those skilled in the art that a massage vibrator has been herein shown and described which is exceptionally light in weight and which readily conforms to the contour of the body of the user whether the latter be a person of stout build or light in weight and thin in body. Moreover, by providing an inherent spring-tensioned belt which automatically conforms to the body of the user the greatest possible skin area is thus engaged by the belt which facilitates the transmission of vibrations to the body portion being treated. Also, since the conical or tapering surface together with its curvature and spring-tension enables the

belt to engage the greatest surface area of the user, the entire vibrator remains firmly in place during operation without the necessity of using the hands, straps, or other supports of any kind, and whether the user is sitting, standing or walking during such operation of the vibrator.

Although I have shown and described in detail one embodiment of my present invention it is to be understood that still further modifications thereof may be made without departing from the spirit and scope of the appended claims.

I claim:

1. A massage vibrator comprising an electrically operated vibrator element and an oval-shaped ribbon-like belt connected thereto, said belt being inherently spring-tensioned to gently but firmly contact an area of the skin of a user substantially equal to the area of one side of said belt when surrounding a part of the body of the user and inherent spring-tension of said belt causing overlapping of its opposed free ends to form substantially an endless belt when not in use or when surrounding a part of the body of the user of no greater diameter than that of said belt in its normally unused state.

2. A massage vibrator comprising an electrically operated vibrator element provided with an oval-shaped belt for surrounding a part of the body of a user connected thereto, said belt being formed of padded spring-steel tensioned to automatically cause substantially the entire surface area of one side of said belt to gently but firmly contact the surrounded body of the user and the spring-tension causing the free opposing ends to overlap to form substantially an endless belt when not in use or when surrounding a part of the body of the user of substantially no greater diameter than that of said oval-shaped belt when not in use.

3. A massage vibrator comprising an electrically operated vibrator element and an oval-shaped belt having a contour which readily conforms to the surrounded body portion of a user connected to said vibrator element, said belt being of padded spring-steel tensioned to cause one side thereof to gently but firmly contact the body of the user throughout substantially the entire area of said side and the tension of said belt being such as to cause overlapping of the free opposing ends to form substantially an endless belt when not in use, or when surrounding a portion of the body of a user at least not substantially greater in diameter than that of said oval-shaped belt when not in use.

4. A massage vibrator comprising an electrically operated vibrator element and an oval-shaped ribbon-like belt connected thereto and provided with a conical inner surface by the diameter of the upper edge of the oval-shaped ribbon-like belt being of slightly smaller diameter than the diameter of the lower edge, said belt being inherently spring-tensioned to gently but formly contact an area of the body of a user substantially equal to the area of one side of said belt when surrounding a part of the body of the user and to cause overlapping of the opposed free ends of said belt when not in use or when surrounding a part of the body of the user of no greater diameter than that of said belt in its normally unused state.

5. A belt for a massage vibrator comprising an oval-shaped ribbon-like belt provided with a conical inner surface by having the diameter of its upper edge in any direction slightly smaller than the diameter of its lower edge when taken in the same diametrical direction, and said belt being of spring-steel covered with a material comfortable when in contact with the body of a user and said belt being tensioned to gently but firmly contact an area of the body of a user substantially equal to the area of one side of said belt when surrounding a part of the body and to cause overlapping of the opposed free ends of said belt when not in use or when surrounding a part of the body of a user of no greater diameter than that of said belt in its normally unused state.

References Cited in the file of this patent

UNITED STATES PATENTS

1,123,873	Heflin	Jan. 5, 1915
1,269,421	Giglio	June 11, 1918
2,574,945	Werner	Nov. 13, 1951