United States Patent

Christensen, Jr.

[15] **3,637,207**

[45] **Jan. 25, 1972**

[54] EXERCISING BELT WITH MUSCLE STIMULATING PRONGS

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[21] Appl. No.: **58,926**

[52] **U.S. Cl.** .....**272/80,** 272/82, 272/57 R, 128/78, 128/2 R, 116/114 G

[51] **Int. Cl.**.....**A63b 21/26,** A63b 23/02

[58] **Field of Search** .....272/82, 83 R, 79 R, 80, 57 R; 128/578, 2 R, 157, 24 R, 160, 96, 78, 101, 111, 117, 293; 2/338; 116/114 G

[56] **References Cited**

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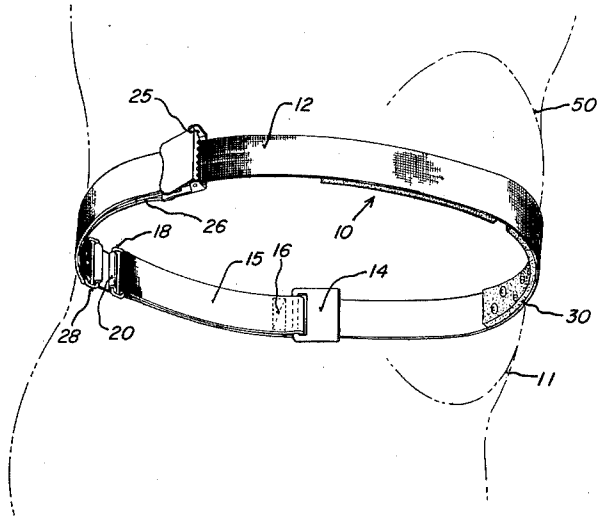
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[57] **ABSTRACT**

A posture belt having a pronged inner surface with a compressible covering position over the pronged surface. The pronged surface will be located over the abdomen when the belt is worn and expansion of the stomach muscles will compress the covering allowing the prongs to irritate and signal the wearer to contract his abdominal muscles to exercise the same and improve posture.

10 Claims, 3 Drawing Figures



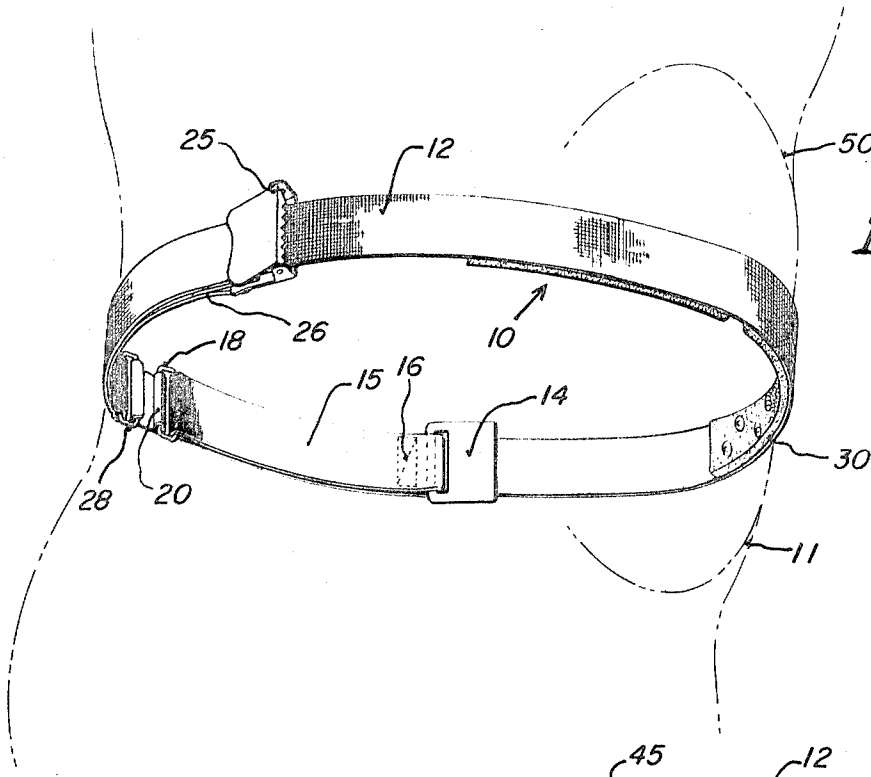


Fig. 1.

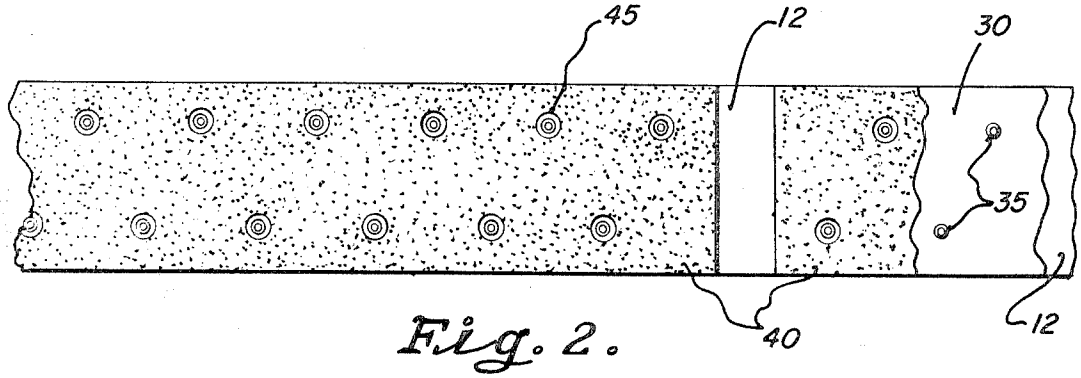


Fig. 2.

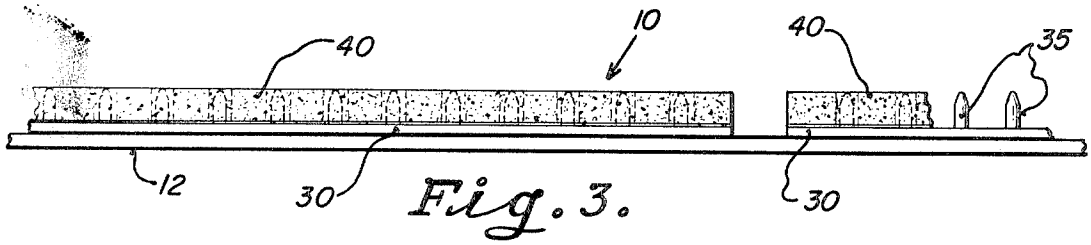


Fig. 3.

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EXERCISING BELT WITH MUSCLE STIMULATING PRONGS

This invention relates in general to physical exercise devices and more particularly to a posture belt for encouraging the exercise of abdominal muscles.

Waistline reduction has been effected in individuals through an overall exercise program or by the wearing of specific exercisers to promote special exercise of the abdominal muscles. Generally these specific devices are either cumbersome such that they cannot be worn continuously or are ineffective for this purpose. The present invention is directed to a simplified abdominal exercise device which primarily irritates the wearer to stimulate contraction of stomach muscles whenever the wearer relaxes stomach muscles as a simple means for providing continual and a simplified exercise program. The improved posture belt is an adjustable belt having a platelike member with prongs thereon to be positioned against the abdomen of the wearer and with a protective sponge material surrounding the prongs such that the prongs provide an irritation to the wearer only when the stomach muscles are relaxed compressing the sponge material and prompting the wearer to contract stomach muscles in a waistline reduction exercise and for the improvement of posture.

Therefore it is the principal object of this invention to provide an improved posture belt.

Another object of this invention is to provide in an improved posture belt a simplified arrangement for providing an irritant to the wearer to call attention to relaxation of the stomach muscles and provide a prompting to the user to contract the same.

A further object of this invention is to provide an improved posture belt which is a simplified exerciser.

These and other objects of this invention should become apparent from the reading of the attached description together with the drawings wherein:

FIG. 1 is a perspective view of the posture belt shown in position on a body,

FIG. 2 is a plan view of a portion of the posture belt, and

FIG. 3 is a side elevation view of a portion of the posture belt.

My improved posture belt is shown in FIG. 1 generally at 10. Outlined in dotted lines at 11 is a portion of a body of a person to depict usage of the belt encircling the waist of the wearer as an exerciser. The body of the belt is formed basically of a strap or belt 12 which may be made of any material, such as fabric or leather, and may take varying forms. One extremity of the belt has connected thereto a metal loop plate 14 to which is connected a strap section 15 folded through the loop and secured thereto as by sewing, indicated generally at 16. The opposite extremity of the connecting strap carries a metallic loop member 18 with a U-shaped metal clip pivotally mounted thereon. The opposite extremity of the belt includes a buckle member 25 through a portion of which the opposite extremity of the belt is looped and sewn as at 26. This extremity of the belt forms a loop and carries a metallic loop member 28 with a portion of the belt being directed through the buckle to provide for adjustment of the length of the same. The U-shaped catch member is adapted to be looped through the loop 28 to secure the extremities of the belt together in assembled relationship. The connecting strap section 15 may be made of any material and may be expandable or elastic as desired.

Intermediate the length of the belt 12 is a platelike member 30 which is attached to the belt by glueing, riveting or other suitable securing means. The platelike member has a width dimension equal to the width dimension of the belt and a thickness dimension which permits it to be bendable, the member being normally made of a plastic material. FIG. 2 shows two platelike members secured to the belt intermediate its extent, such as to fit around and conform to the abdomen of the wearer. Positioned on or formed integral with the platelike members 30 are a plurality of prongs or sharp projections 35 which are spaced along the extent of the same in

rows, the prongs being tapered or pointed at their free extremities and may be rigid or flexible. The prongs are constructed with the same height or length dimension. Positioned over the plate member 30 is a compressible member 40 which is made of a spongelike material, such as foamed plastic. This member has a length and width dimension similar to the plate members 30 and include a plurality of apertures 45 therein aligned to fit over the prongs 35 on the plate members. The spongelike member is attached to the platelike members through suitable means such as glueing. The thickness of the compression member 40 is basically the same as the height or length of the prongs 35 such that the tips of the prongs will align with the upper surface of the compressible members. Where desired, the compressible members may be eliminated and the prongs themselves made compressible.

While I have used separate platelike members with prongs thereon for simplicity of forming, it will be understood that the prongs may be attached to the belt member through any suitable means eliminating the plate members. In use the improved posture belt is positioned around the waist of the wearer with the prongs positioned inwardly and the belt oriented such that the pronged side thereof is adjacent the abdomen, such as is indicated at 50 in phantom in FIG. 1. The length of the strap is adjusted so that the belt encircles the wearer snugly in a condition where the stomach muscles are slightly contracted drawing the stomach in. Where elastic strap section 15 is utilized, a small amount of pressure would be placed on the abdomen. The belt may be worn over or under clothing, preferably over clothing, and upon relaxation of the stomach muscles, expansion of the abdomen will cause the compressible member 40 to be compressed slightly allowing the prongs 35 to protrude and cause an irritant to the wearer stimulating a contraction of stomach muscles. By continual wearing of the belt for extended periods, the wearer will be required to contract stomach muscles periodically and will be conscious of the expansion or extension of the same. The wearing of the belt will provide exercise of the abdominal muscles and will permit the wearer to become used to a condition in which the stomach muscles are contracted improving posture and appearance. The belt may be shortened periodically by operation of the buckle 25, such that as abdominal muscles are strengthened a new position for the belt will be obtained to provide for continuing exercise of the abdominal muscles and improvement of posture.

In considering this invention it should be remembered that the present disclosure is illustrative only and the scope of the invention should be determined by the appended claims.

What is claimed is:

1. A posture belt comprising, a belt of flexible material having connecting means at the extremities of the same, a compressible means attached to the inner surface of said belt, a plurality of prongs attached to the inner surface of said belt and projecting from the surface of said belt, said prongs being positioned within apertures in said compressible means, said prongs having a substantial length to equal the thickness of the compressible means, said belt being adapted to be worn around the waist of a human with the prong side thereof positioned adjacent to the abdomen of the wearer, said compressible means being so located on the inner surface of the belt to result in compression of the compressible means of the abdominal muscles of the wearer and subject the wearer to irritation caused by the prongs; the irritation being a signal during an exercise program for the wearer to contract his abdominal muscles.

2. The posture belt of claim 1 in which the compressible means is a platelike member of a compressible spongelike material positioned around the prongs with the tips of the prongs exposed.

3. The posture belt of claim 2 in which the plurality of prongs are carried by at least one platelike member attached to the belt.

4. The posture belt of claim 3 in which the platelike member is an elongated member attached to the belt of flexible materi-

al and having a width dimension the same as the width dimension of the belt of flexible material.

5. The posture belt of claim 4 in which the platelike member is bendable and the prongs thereon have pointed tips and are formed integral with the same.

6. The posture belt of claim 5 in which the platelike member is formed of a plastic material and the prongs thereon are distributed in two rows extending along the length of the same.

7. The posture belt of claim 3 in which at least two platelike members with prongs thereon are attached to the belt of flexible material.

8. The posture belt of claim 6 in which the spongelike material is an elongated member having the same length and width dimensions as the platelike member with a plurality of apertures positioned therein to fit around the prongs with the member being attached to the platelike member.

9. The posture belt of claim 2 in which the belt of flexible material includes at least an expandable section therein.

10. The posture belt of claim 9 in which the connecting means on the belt of flexible material includes an adjustable section for varying the length of the belt.

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,637,207 Dated January 25, 1972

Inventor(s) Chester W. Christensen, Jr.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Claim 1, Line 12, after "compressible means", insert the following -- with relaxation --.

Signed and sealed this 3rd day of October 1972.

(SEAL)
Attest:

EDWARD M.FLETCHER,JR.
Attesting Officer

ROBERT GOTTSCHALK
Commissioner of Patents

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