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R. D. HOARD

1,928,893

VAGINAL AND RECTAL EXERCISER

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Fig. 1

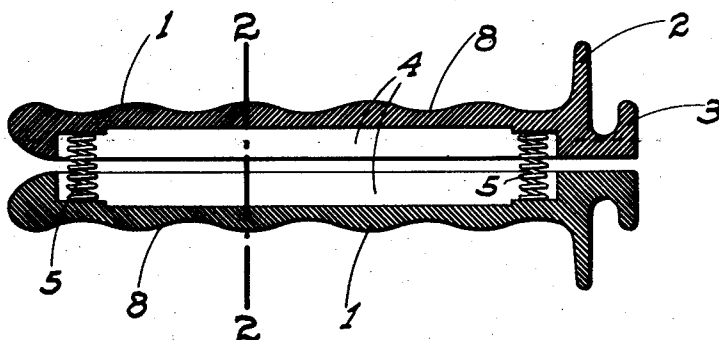


Fig. 2

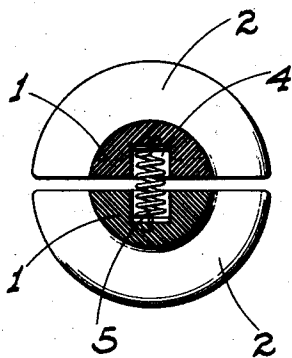
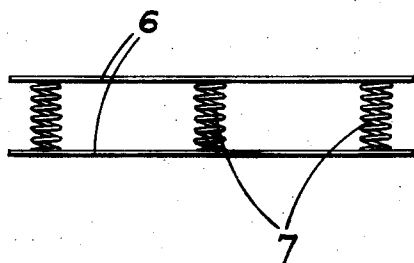


Fig. 3



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VAGINAL AND RECTAL EXERCISER

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1 Claim. (Cl. 128—341)

This invention relates to obstetrics and particularly to a device for exercising the sphincter vagina and the levator ani after the muscles and tissues of these parts have been subjected to severe strains and dilations so that they are weakened; and for also exercising the sphincter ani and the levator ani of the rectum when the disused muscles of this member have caused various ills such as hemorrhoids.

Such muscles become temporarily weakened from excessive strain or from disuse and the surrounding tissues also become detrimentally affected by the weakening and loss of tone of the muscles. It has long been appreciated that exercise is required to build up the muscles of other parts of the body after periods of disuse of the same, as after lying in bed for some time following an illness or after living a sedentary life for a certain period.

I have practiced obstetrics for some years and have recognized the value of exercising the vaginal and rectal muscles. Heretofore however such exercising has been performed by the patient by a squeezing action of the part affected and without the aid of any mechanical appliance. This has proved of great benefit but as far as the possible effectiveness of an exercising treatment is concerned, it may be compared to performing dumbbell exercises without using the dumbbells themselves.

The principal object of my invention therefore is to increase the effectiveness of the exercising and squeezing action by providing an exercising device which will yieldably resist such action, and whose use quickly builds up the muscles to their approximate normal condition and tone. As a result of thus exercising the muscles the condition of the adjacent tissues is also greatly benefited and all parts are shortly brought back to their normal size and condition; a condition which is reflected in a better sense of well-being on the part of the patient.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claim.

In the drawing similar characters of reference indicate corresponding parts in the several views:

Fig. 1 is a sectional elevation of my improved exerciser.

Fig. 2 is a cross section on the line 2—2 of Fig. 1.

Fig. 3 is a side elevation of a spring attachment for use in the exerciser.

Referring now more particularly to the characters of reference on the drawing, the exerciser comprises a body of substantially cylindrical form and of desired length and diameter for its particular purpose. The body is preferably made of hard rubber or some similar material and consists of a pair of separated but complementary members 1 each of substantially semi-circular form in cross section. At one end the body is provided with an enlarged flange 2 which limits the projection of the exerciser into place. Outwardly of the flange the body has a knob 3 whereby the device may be easily manipulated.

Intermediate their ends the body members are provided with relatively deep longitudinally extending depressions in and adjacent faces forming a cavity 4 of rectangular form. In and near the ends of the cavity a pair of compression springs 5 are mounted; the ends of the springs being permanently connected to the body members in any suitable manner so as to form a connecting means between said members. The springs act to normally hold the body members separated a certain distance and of course yieldably resist a pressure tending to bring said members together.

When the exerciser is in place therefore a squeezing action on the part of the patient causes said body members to be moved together against the resistance of the springs, and this resistance supplies the work for the surrounding muscles which is necessary for them to regain their normal condition and tone, and cause a corresponding return to normal condition of the tissues and other parts associated with the muscles.

After a period of use with the above exerciser, a stronger exerciser or one requiring more resistance to overcome is frequently desirable to complete the treatment. To provide such increased resistance without having to use a different exerciser I have designed a suitable attachment for the purpose. This comprises a pair of flat plates or bars 6 adapted to fit in the cavity 4 and to rest against the bottoms of the opposed cavity-depressions. Compression springs 7 extend between and are permanently connected to the adjacent faces of the plates.

The springs 5 are arranged so that they may be expanded and laterally flexed to a considerable extent, which enables the body members to be flexibly separated or sprung apart sufficient to

permit of the ready insertion of the bar and spring unit into the cavity, or the removal of said unit from the cavity.

The body is preferably of wavy contour from
5 end to end as at 8 in order that it will better hold
itself in place. It is to be understood that the
exerciser is to be made in different sizes for its
different uses, and with different strengths of
springs, but in any case the functioning of the
10 device is the same.

From the foregoing description it will be readily
seen that I have produced such a device as sub-
stantially fulfills the objects of the invention as
set forth herein.

15 While this specification sets forth in detail the
present and preferred construction of the device,
still in practice such deviations from such detail
may be resorted to as do not form a departure

from the spirit of the invention, as defined by the
appended claim.

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

An exerciser for the muscular walls of a human
canal comprising a plurality of separate comple-
mentary segments forming a substantially cylin-
drical body and yieldable compression elements
interposed between the segments, the tension of
such elements being normally such as to separate
the segments and dilate the muscular walls of
the canal when the exerciser is disposed therein
but capable of being compressed by a contracting
action imparted to such muscles by the user of
the exerciser.

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