

Nov. 2, 1926.

1,605,792

L. SIMMONS

EXERCISING DEVICE

Filed March 18, 1926

3 Sheets-Sheet 1

*Fig. 1.*

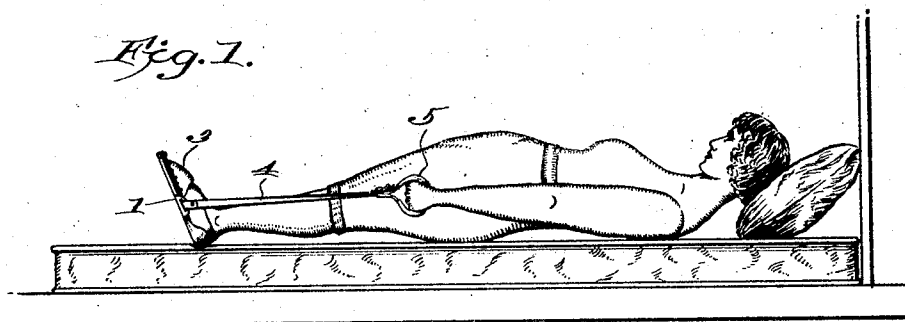


*Fig. 2.*

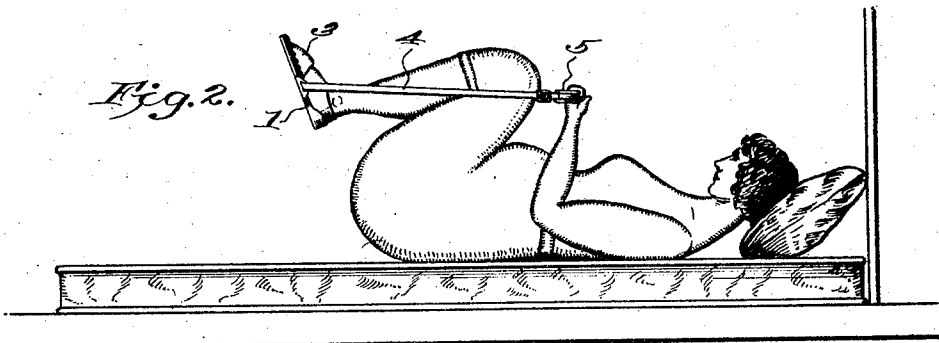
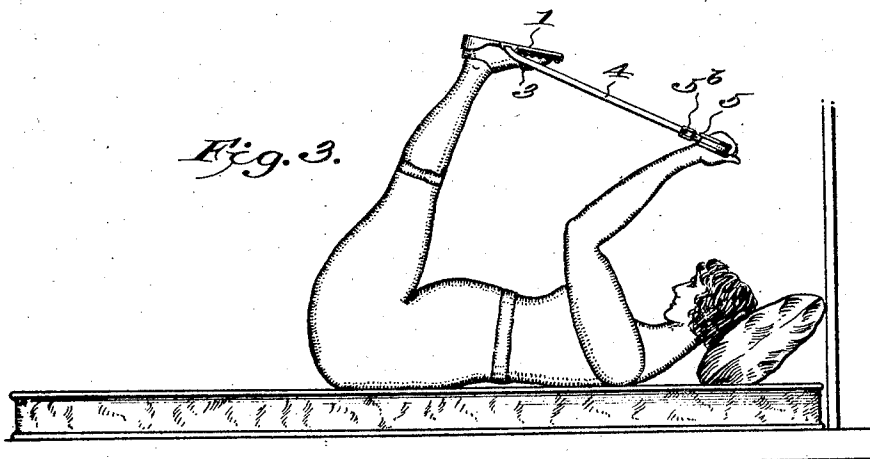


*Fig. 3.*



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*Fig. 4.*

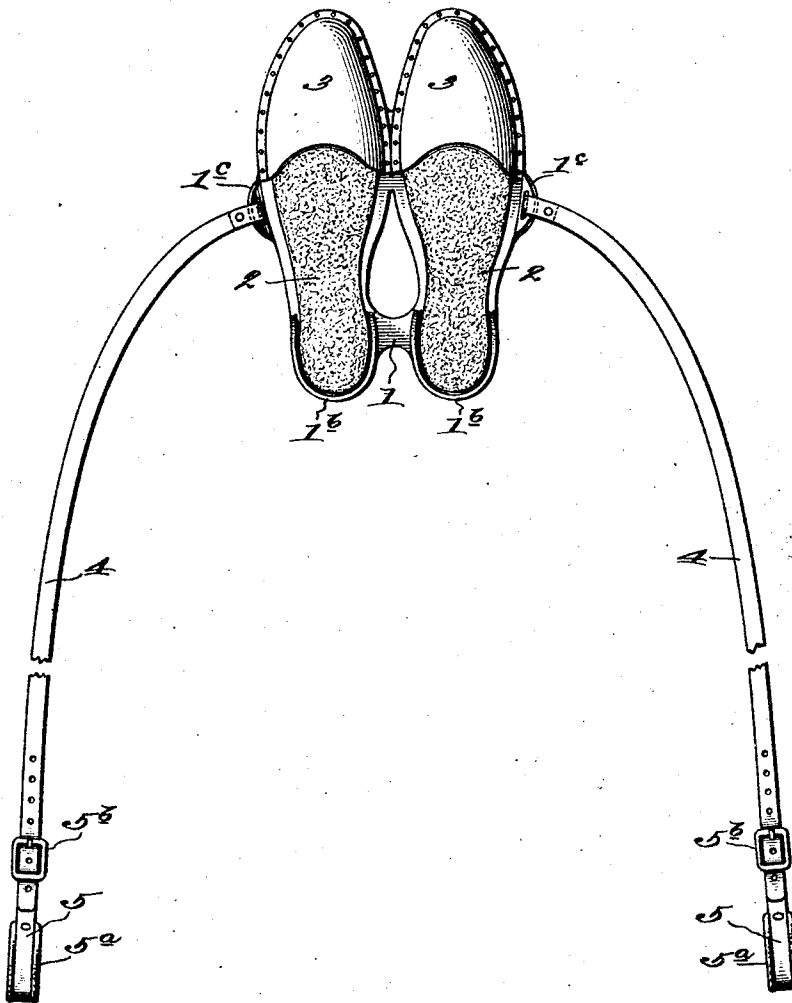
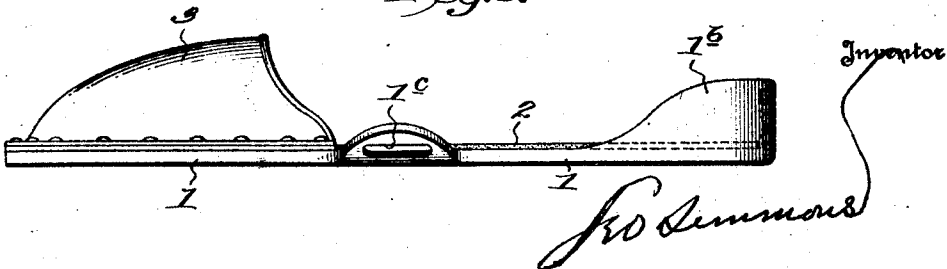


*Fig. 5.*



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Fig. 6.

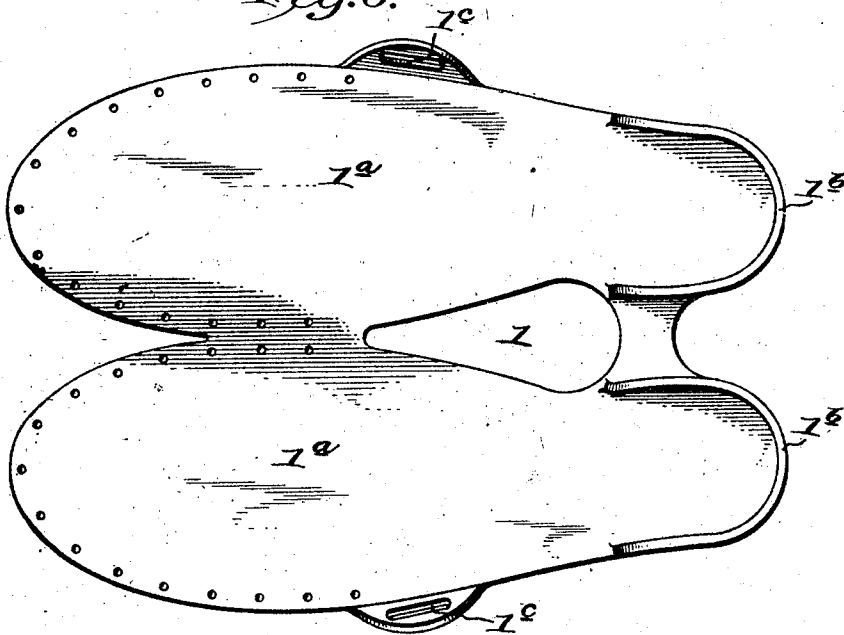


Fig. 7.

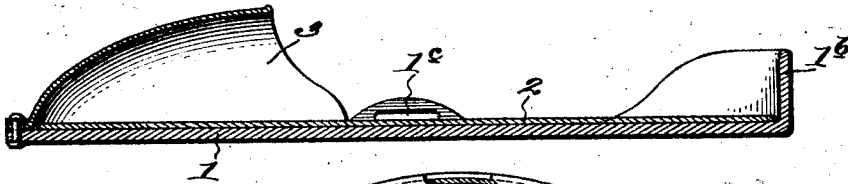


Fig. 8.

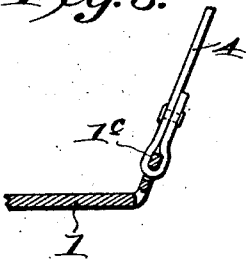


Fig. 9.

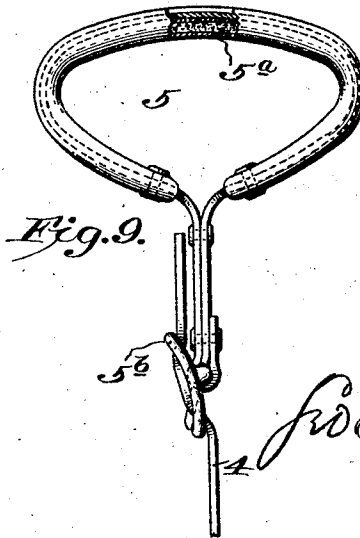
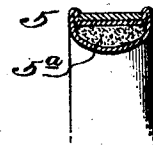


Fig. 10.



Inventor

L. Simmons

## UNITED STATES PATENT OFFICE.

LEO SIMMONS, OF WASHINGTON, DISTRICT OF COLUMBIA.

## EXERCISING DEVICE.

Application filed March 18, 1926. Serial No. 95,731.

This invention provides a simple and comparatively inexpensive apparatus for use in exercising various portions of the human body and particularly as an aid in carrying on certain waist-line reducing exercises or movements; and the objects and nature of the invention will be readily understood by those skilled in the art in the light of the following explanations of the accompanying drawings that show what I now believe to be the preferred mechanical expression or embodiment of the invention from among other forms, constructions and arrangements within the spirit and scope of the invention.

An object of the invention is to provide comparatively simple and durable means for aid and guidance in carrying out various healthful muscle strengthening and fat-reducing movements and exercises, and as an aid in exercises particularly designed to cause flexing under tension of leg, arm, and body muscles, with the end in view of reducing the waist-line.

With this and other objects in view, the invention consists in certain novel features in construction, and in combinations and arrangements as more fully described and specified hereinafter.

Referring to the accompanying drawings, forming a part hereof:

Figs. 1, 2 and 3 are more or less diagrammatical illustrations, in side elevation, showing a person in three different positions using the exercising device of my invention.

Fig. 4 shows in top plan, the exercising device of my invention.

Fig. 5 is a detail view elevation of the duplex stirrup or holding member for the feet, the pull connections being removed.

Fig. 6 is a detail top plan view of the base plate or frame of the feet holding member or stirrup.

Fig. 7 shows the feet holding member in longitudinal section.

Fig. 8 is a detail view showing the connection between the frame of the feet holding member and a pull connection.

Fig. 9 is a detail view of the handle portion of a pull connection, the handle being partially broken away.

Fig. 10 is a detail cross section of said handle.

The device of my invention, shown as the embodiment that I now prefer, comprises a

duplex stirrup or single holder for both feet having two elongated handles or right and left pull connections coupled to the outer sides or outer longitudinal edge portions thereof and extending rearwardly therefrom and arranged to be grasped by both hands so that the power of the arms can be utilized in pulling against the power of the legs, or vice versa, in stretching and contracting muscles of the body and in forcing the muscles to perform work under force or tension, and in swinging the legs together or as one, to various positions to forcibly exercise various and sundry muscles, and particularly body and abdominal muscles to remove surplus body accumulations of fat or tissue and reduce the waist-line.

The stirrup or holder for the two feet consists of a single or one piece stiff strong plate 1, of a general flat formation providing two parallel rigidly connected sole portions 1<sup>a</sup>, arranged side by side, each at the rear having an upturned counter or heel flange 1<sup>b</sup>, and each, at its outer longitudinal side edge about midway its length, having an upturned ear 1<sup>c</sup>, for the attachment of a pull connection. It will thus be noted, that the outer opposite sides of the base plate, provide for the attachment of the right and left hand pull connections.

The duplex stirrup or single member for the two feet, is preferably equipped with more or less soft or cushioning individual inner soles 2, and more or less soft flexible individual uppers 3, to receive the front portions of the feet respectively, and to cooperate with the counter or heel flanges 1<sup>b</sup>, in holding the feet to and against accidental slipping or detachment from the stirrup during the exercises.

In the particular example illustrated, the right and left pull connections, are similar, and each consists of an elongated strong flexible strap 4, which is non-spring or non-elastic, at one end coupled to the stirrup through the medium of an eye 1<sup>c</sup>, to form a preferably permanent connection, and at its opposite or free end provided with a suitable handle, such as loop handle 5, having cushioning hand grip 5<sup>a</sup>. This handle 5, is preferably adjustable longitudinally of strap 4, to provide a pull connection that can be increased or decreased in length. For instance, I show the handle 5, coupled to the strap 4, by means of a suitable buckle 5<sup>b</sup>,

through which the strap is longitudinally adjustable.

The device of my invention is particularly designed for use with the operator in a reclining position on the back with both feet confined to the single or duplex stirrup, and thereby held in approximately relatively fixed position, and with the two pull connections grasped by the right and left hands, respectively, and arranged at opposite sides of the legs.

The duplex holder for the feet prevents the natural tendency of the feet and legs to spread and separate when the legs are being pulled and swung as one by the hands and arms through the medium of the pull straps; and said holder, which is designed and arranged to be carried by the feet, also holds the feet from slipping from the holder, or the holder from the feet while the legs are being swung and flexed to various positions by the pull of the hands through the pull straps.

It will also be noted that the non-elastic pull straps are relatively short with respect to the length of the legs, being of a length to virtually extend the arms to the holder for the feet to enable the arms to swing the legs when the body is reclining partially or wholly on the back.

With the device thus arranged, the legs can be swung together as one vertically to various positions either with the assistance or against power of the arms, and many muscles of the body as well as of the arms and legs can be forced to exercise power and can be put under tension, to increase the circulation, and aid in muscle development as well as to aid in removal of surplus weight and particularly to decrease the waist measurement.

It is evident that various changes, modifications, and variations can be resorted to without departing from the spirit and scope of my invention and hence I do not wish to limit myself to the approximately precise disclosures hereof.

What I claim is:—

1. An exercising device for swinging and flexing the legs simultaneously when held approximately together with the body reclining on the back or hips, said device comprising a holder constructed and arranged to receive and be carried by both feet and to hold said feet in relative fixed positions and the holder against slipping therefrom, and separate right and left hand pull connections constructed and arranged to extend from the holder to the hands, at opposite sides of the feet, legs and body, said connections being flexible and operatively non-elastic.

2. An exercising device for swinging and flexing the legs, comprising a holder constructed and arranged to be carried by and to receive and hold both feet thereto against

relative separation and slipping, and a pair of separate non-elastic pull connections at their free ends having hand grips and at their opposite ends coupled to the holder at opposite sides thereof so as to be arranged during operation when the body is in a reclining position, at opposite sides of the body, legs and feet.

3. An exercising device for flexing the joints of the legs and arms, comprising means constructed and arranged to be carried by and to fit both feet and to hold the feet and legs together in relatively fixed positions while being swung; and separate right and left hand pull substantially non-elastic connections having handles at their free ends and at their opposite ends directly coupled to said means so that the feet and legs will be located between said pull connections, said pull connections being relatively short in length with respect to the legs of the operator.

4. An exercising device for lifting and swinging the legs when the body is reclining, comprising a semi-housed holder for both feet, said holder formed and constructed to be carried by the feet and to hold the feet in relatively fixed positions against separation and slipping, and right and left hand non-elastic pull connections coupled to opposite side portions of said holder.

5. An exercising device for swinging the legs and arms, comprising a holder embodying frame and receiving means for both feet carried by said frame and constructed and arranged to receive both feet and hold the feet and legs in relatively fixed positions and against slipping, and separate non-elastic hand pull connections operatively fixed in length, having hand grips at their free ends and at their opposite ends having direct pull connection with opposite portions of said frame in such manner that in use the feet and legs will be located between the two pull connections.

6. An exercising device for swinging and flexing both legs together, comprising a base frame having separate semi-housings for the two feet constructed to hold the feet together and the holder to the feet, each semi-housing having upper and counter portions; and right and left hand non-elastic pull connections coupled to opposite edge portions of the base frame.

7. An exercising device for use through the medium of the hands and arms in swinging the legs as one toward and from the abdomen while not carrying the weight of the body, said device consisting essentially of means constructed and arranged to be held and carried by both feet and to hold the feet and legs against spreading apart, and separate right and left hand substantially non-elastic pull connections directly coupled to said means, said connections be-

ing relatively short in length with respect to the legs to form direct straight line connections at opposite sides of the body, legs and feet from the hands to opposite side portions of said means.

8. An exerciser for use through the medium of the hands and arms, when the body is on the back or hips, in swinging the legs together to flex the knee, ankle and hip joints, said exerciser consisting essentially of opposite side separate right and left hand non-elastic pull connections each independently adjustable in length, said connections being relatively short with respect to the legs, and a holder for and to be carried by both feet, said holder embodying semi-housings for the two feet and a support for the housings, said connections being directly coupled to the support.

9. An exerciser for use through the medium of the hands and arms, when the body is on the back in swinging the legs as one vertically to compress the abdomen and to flex the knee and hip joints, consisting essentially of right and left hand pulls normally of fixed lengths and each independently adjustable in length, said pulls being relatively short in length with respect to the legs, and a holder for and to be carried by both feet, said holder embodying a plate to which said pulls are coupled, and a pair of housings on the top side of said plate for the feet, respectively, to hold the feet and legs against spreading and the feet against slipping from the plate.

Signed at Washington, D. C., this 15th day of March, 1926.

LEO SIMMONS.