

March 21, 1933.

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GYMNASTIC APPARATUS

1,902,694

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2 Sheets-Sheet 1

Fig. 1

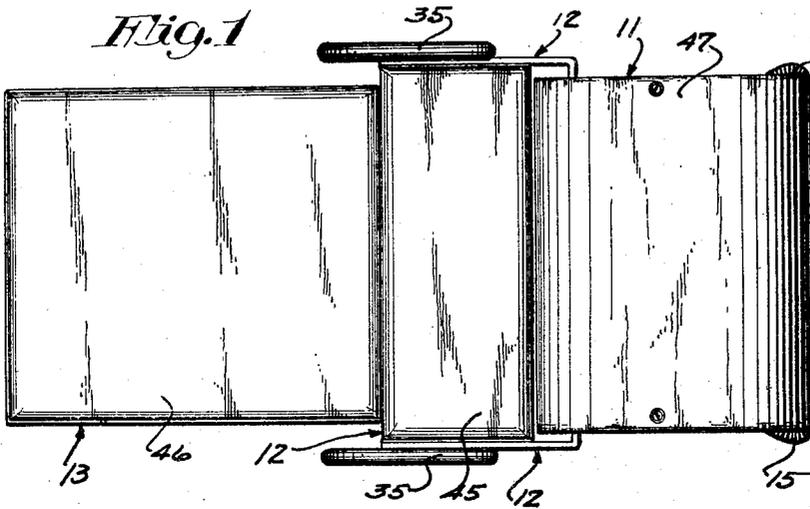
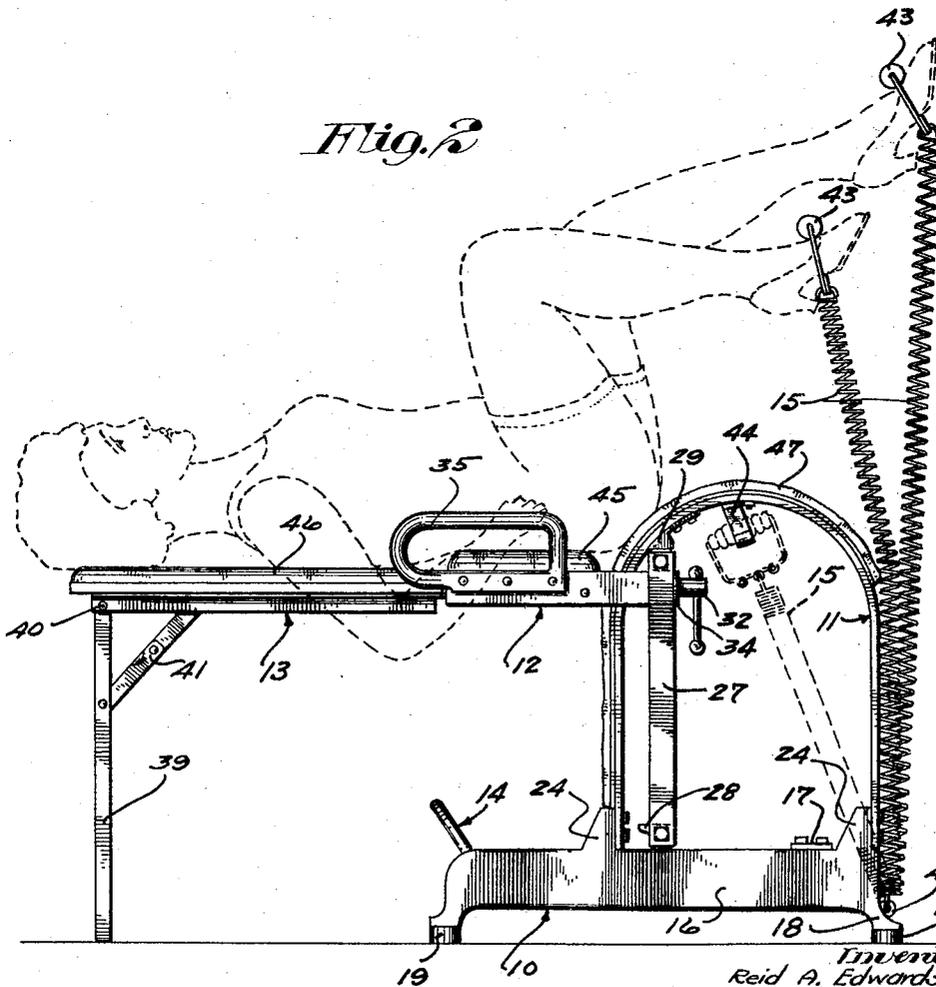


Fig. 2



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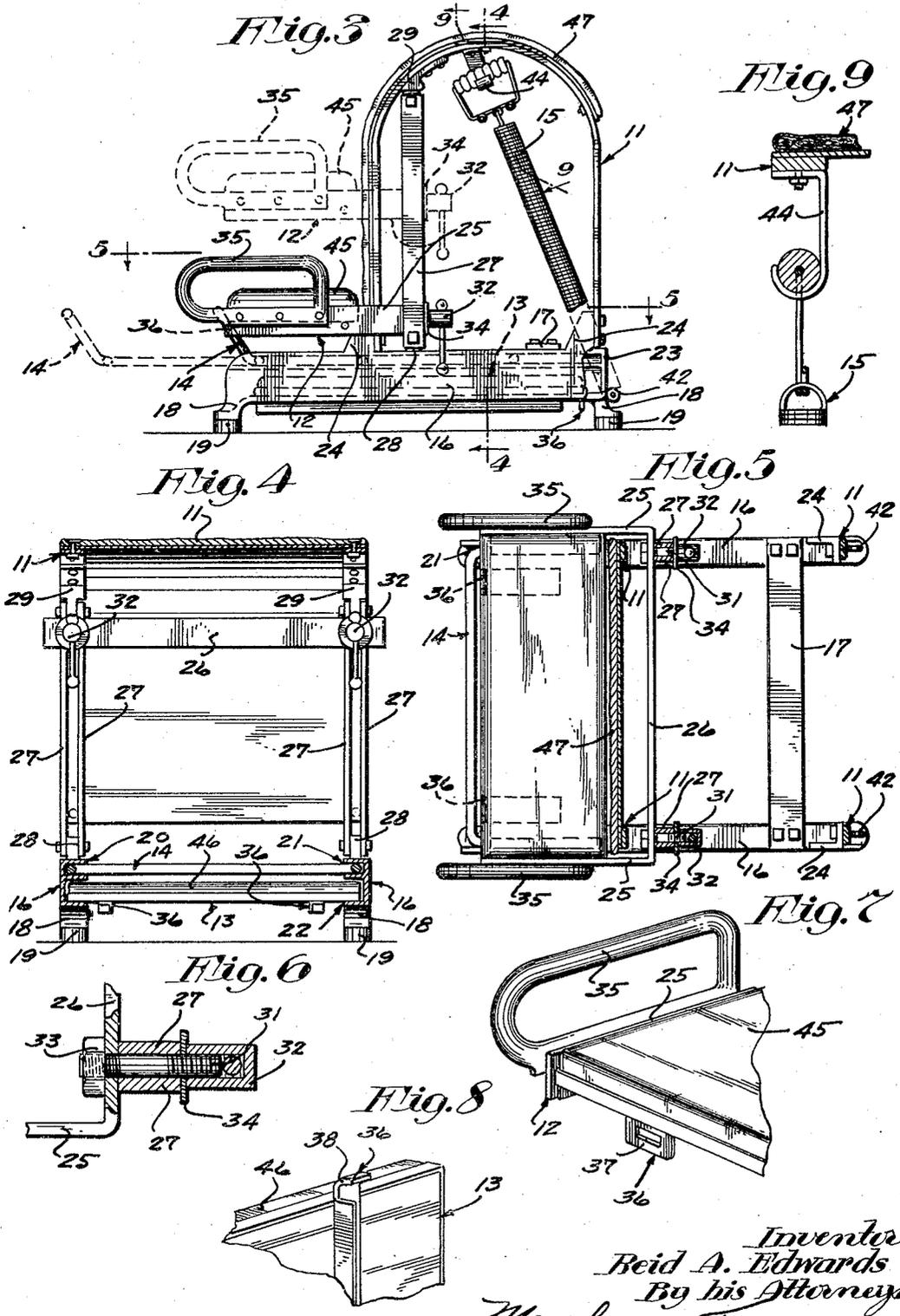
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UNITED STATES PATENT OFFICE

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GYMNASTIC APPARATUS

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My present invention relates to gymnastic apparatus and has for its object the provision of an extremely simple and highly efficient piece of apparatus on which a person may exercise and secure substantially all the benefits obtained on a plurality of individual pieces of apparatus as now used.

The invention further provides a piece of exercising apparatus that may be very quickly and easily adjusted to fit the person exercising thereon so as to secure the maximum benefit therefrom.

To the above end, generally stated, the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings:

Fig. 1 is a plan view of the apparatus with the table attached;

Fig. 2 is a side elevation of the apparatus, as shown in Fig. 1, and further illustrating, by means of broken lines, a woman lying on the apparatus with the exercising springs, indicated by full lines, attached to her feet, said springs all being illustrated in operative positions by means of broken lines;

Fig. 3 is a side elevation of the apparatus with the table removed and stored in the base, as indicated by means of broken lines, and with the seat and foot rest shown in different positions by means of broken lines;

Fig. 4 is a vertical transverse section taken on the line 4—4 of Fig. 3;

Fig. 5 is a horizontal section taken on the line 5—5 of Fig. 3;

Fig. 6 is a fragmentary detail view of one of the seat holding clamps, some parts being shown in full and other parts being shown in horizontal section, on an enlarged scale;

Fig. 7 is a fragmentary perspective view of the seat;

Fig. 8 is a fragmentary perspective view of the table; and

Fig. 9 is a fragmentary detail view with some parts sectioned on the line 9—9 of Fig. 3, on an enlarged scale.

The improved gymnastic apparatus includes a base 10, an arch member 11, a seat 12, a table 13, a foot rest 14 and exercising springs 15. Said base 10 comprises a pair of cast side members 16 and front and rear cross-tie bars 17 only the latter of which is shown. The sides of the base members 16 have front and rear short feet 18 provided with cushions or pads 19 of rubber or any other suitable material. Cast with the inner face of each side member 16 are three longitudinally extended reinforcing flanges 20 that are vertically spaced, the one above the other. The opposing pairs of flanges 20 afford a pair of upper channel guides 21 for the foot rest 14 and a pair of lower channel guides 22 for holding the table 13, when not in use, stored in the base 10.

Webs 23 cast with the rear ends of the side members 16 connect the flanges 20 and afford stops that limit the sliding movement of the table 13 into the guides 22.

The arch member 11 is formed from sheet metal and the front and back thereof, which extend transversely of the base 10, are rigidly secured, at their lower edge portions, to front and rear pairs of upstanding anchor lugs 24 cast with the side members 16 and top flanges 20. The outer face of the back of the arch member 11 is substantially flush with the rear ends of the side members 16 and the front of said member is spaced considerably rearward of the front ends of the side members 16, thus leaving a portion of the base 10 forward of the arch member 11.

The seat 12 directly overlies the base 10, forward of the arch member 11, and is rigidly secured at its sides to the arms 25 of a U-shaped bar the transverse portion of which affords a cross-tie member 26 for the arms 25. The seat 12 is fitted between the arms 25 and which arms project rearwardly and outwardly of the arch member 11 and the cross-tie bar 26 extends completely through said member.

The arms 25 are rigidly but adjustably secured to a pair of fixed posts 27, each of which comprises a pair of upright bars that extend edgewise transversely of the cross-tie member 26. This cross-tie member engages the

front faces of the posts 27 with freedom for vertical sliding movement thereon. Said cross-tie member 26 also affords the relatively fixed member of certain clamping means for securing the arms 25 to the posts 27, as will hereinafter appear. The posts 27 are rigidly secured at their ends to anchor lugs 28 on the top flanges 20 and anchor lugs 29 secured to the arch member 11 on the under side thereof. Said anchor lugs 28 and 29 extend between the pairs of bars of each post 27 and hold the same laterally spaced.

The clamping means, heretofore referred to and of which the cross-tie member 26 forms a part, further include a pair of screw-studs 31 to which are applied a pair of hand-piece-equipped nuts 32. The screw-studs 31 extend through the slots in the posts 27 and their front ends are anchored to the cross-tie member 26 by threaded engagement therewith and nuts 33 applied to said studs. Washers 34 on the studs 31 are interposed between the posts 27 and the nuts 32. Obviously the posts 27 afford bases of resistance for the nuts 32.

The position of the seats 12 on the arms 25 is such as to tend to tilt said arms forwardly and downwardly, particularly when there is a load on the seat 12, and cause a biting action between the cross-tie member 26 and the posts 27 that securely holds said member and prevents the same from slipping on the posts 27. A pair of handles 35 in the form of loops are rigidly secured, one to each of the arms 25.

The table 13 forms a forward extension of the seat 12, when raised to the height of said table, and is detachably secured at its rear end to said seat 12 by a pair of separable fasteners 36. Each fastener 36 includes an apertured member 37 on the under side of the seat 12 and a hook member 38 on the under side of the table 13. The hook members 38 are arranged to be interlocked with the apertured members 37 by a hinge-like movement of the table 13 with respect to the seat 12. A pair of folding legs 39 support the outer end of the table 13. These legs 39 are hinged at 40 to the table 13 for folding movement onto the under side thereof. Toggle braces 41 between the table 13 and the legs 39 are provided for holding the legs 39 in operative positions. When the table 13 is not in use its legs 39 may be folded thereunder and said table detached from the seat 12 and stored in the base 10 by sliding the same into the guide grooves 24 from the front ends thereof.

The exercising springs 15 are tightly coiled and anchored at one of their ends to eye lugs 42 on the rear ends of the side members 16. Handles 43 in the form of loops are attached to the free ends of the exercising springs 15. When the exercising springs 15 are not in use they may be held within the arch member 11 by a pair of hooks 44 se-

cured to said member on the under side thereof.

The seat 12 and the table 13 are padded, as indicated by the numerals 45 and 46, respectively, and the arch member 11 is provided with a pad 47. This pad 47 extends over the top of the arch member 11 between said arch member and the seat 12 and substantially completely covers the front side of said arch member.

The foot rest 14 is slidably mounted in the guide grooves 22 and the top flanges 20 act as stops to limit the sliding movement of said foot rest into the base 10.

For the purpose of this case it will not be necessary to describe in detail the benefits obtained by taking regular exercises on the improved apparatus and it will suffice to briefly state a few of the many different exercises that may be taken.

In Fig. 1 is illustrated by means of broken lines, a woman lying on her back on the seat 12 and table 13 with her feet inserted through the handles 43 of the exercising springs 15. By means of these springs 15 many different leg exercises may be taken. By turning around and reclining on the seat 12 and table 13 with the head resting on the arch member 11 and grasping the handles 43 in the hands, various arm exercises may be taken; or by detaching the table 13 and sitting on the seat 12 when adjusted to the proper height, in a reclining position over the arch member 11 and grasping the handles 43 in the hands, body and arm exercises may be taken. It is also possible to use the exercising springs when standing on the floor at the back of the apparatus.

A person may stand on his head on the seat 12 while grasping the handles 43 and then roll over the arch member 11. In this use of the apparatus it is highly important that the seat 12 be adjusted to the proper height with respect to the top of the arch member 11, so as to fit all persons regardless of build. When a person is seated on the seat 12 when taking various different exercises a toe or foothold may be taken on the front end of the foot rest 14 which, as shown, includes a pair of horizontal parallel rods.

The drawings illustrate a commercial form of the invention, but it will be understood that the same is capable of certain modifications as to details of construction, arrangement and combination of parts within the scope of the invention herein disclosed.

What I claim is:

1. In an apparatus of the class described, a base, an arch member, and a vertically adjustable seat on the base.

2. In an apparatus of the class described, a base having an arch member, and a vertically adjustable seat in front of the arch.

3. The structure defined in claim 2 in

which the seat is provided with a pair of handles, one on each side thereof.

4. The structure defined in claim 2 which further includes a pad that extends over the top of the arch member and in front thereof adjacent to the seat.

5. In an apparatus of the class described, a base having an arch member, a pair of fixed ways under the arch member, a seat in front of the arch member and having a pair of rearwardly projecting arms, and clamping means for securing the arms to the ways in different vertical adjustments.

6. In an apparatus of the class described, a base having an arch member, a pair of posts under the arch member and each thereof having a vertical slot, a seat in front of the arch member and having a pair of rearwardly projecting arms, and clamping means for securing the arms to the posts in different vertical adjustments, said clamping means comprising a cross-tie member connecting the arms and extending through the arch member and contacting with the faces of the posts, screw-studs on the cross-tie member and extending through the slots in the posts, and hand-piece-equipped nuts on the studs, engaging the posts as bases of resistance and operable to frictionally clamp the cross-tie member onto the posts.

7. The structure defined in claim 2 which further includes a foot rest mounted on the base for horizontal adjustment into an operative position in which it projects forward of the seat.

8. The structure defined in claim 2 which further includes a foot rest mounted on the base for horizontal adjustment into an operative position in which it projects forward of the seat or into an inoperative position in which it is substantially entirely under the seat and arch member.

9. The structure defined in claim 2 which further includes a pair of coiled exercising springs back of the arch member and anchored at one of their ends to the base and having handles on their free ends.

10. The structure defined in claim 2 which further includes a pair of coiled exercising springs back of the arch member and anchored at one of their ends to the base and having handles on their free ends, and means under the arch member for holding the exercising springs when not in use.

11. The structure defined in claim 2 which further includes a pair of coiled exercising springs back of the arch member and anchored at one of their ends to the base and having handles on their free ends, and hooks on the under side of the arch member with which the handles of the exercising springs may be interlocked to hold said springs when not in use.

12. In an apparatus of the class described, a base having an arch member, a seat sup-

ported from the base in front of the arch member, a table in front of the seat and supported at its rear end therefrom, and legs supporting the table at its front end.

13. The structure defined in claim 12 in which the legs are foldable under the table.

14. The structure defined in claim 12 in which the table is detachable from the seat.

15. In an apparatus of the class described, a base having an arch member, a seat supported from the base in front of the arch member, a table detachably supported from the seat at its rear end, and foldable legs supporting the table at its front end, said base having means for supporting the table when detached from the seat and its legs folded.

16. The structure defined in claim 12 which further includes a pair of exercising springs anchored at one of their ends to the base and having handles at their free ends.

17. An apparatus of the class described, a base having an arch member, a pair of fixed upright ways under the arch member, a seat in front of the arch member and having a pair of rearwardly projecting arms, and clamping devices for securing the arms in different vertical adjustments and including a cross-tie member connecting the arms.

In testimony whereof I affix my signature.
REID A. EDWARDS.

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