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A. R. MATT, SR
EXERCISING DEVICE

3,295,847

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FIG 1

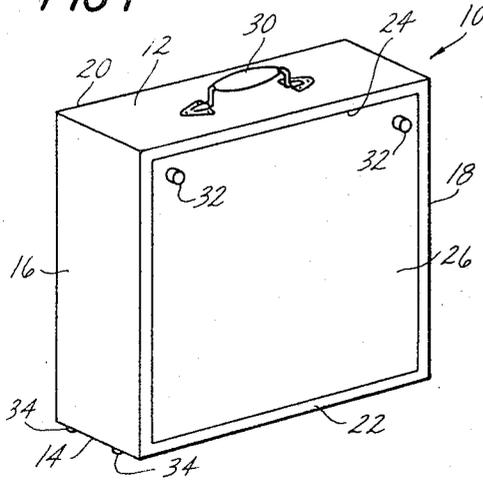


FIG 2

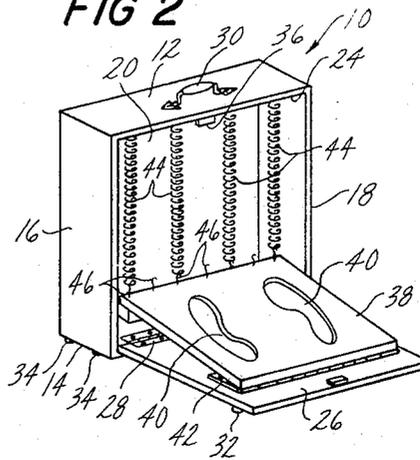


FIG 3

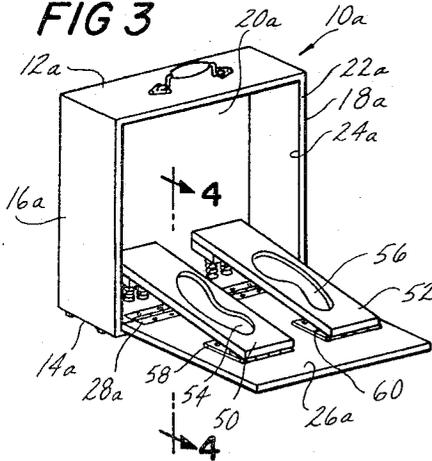


FIG 4

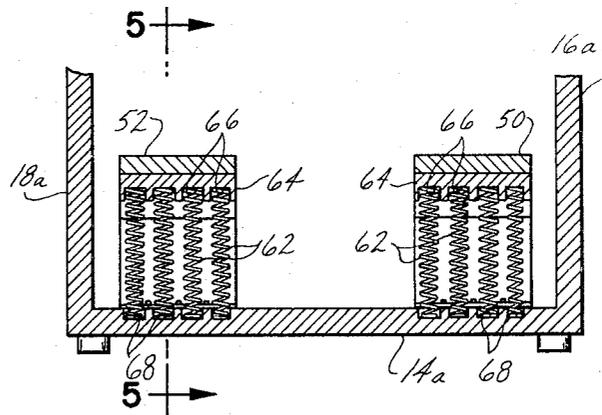
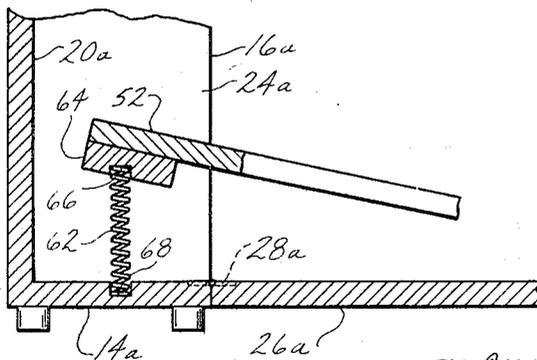


FIG 5



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3,295,847

EXERCISING DEVICE

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This invention relates to exercising devices and, more particularly, to a portable exercising device adapted for operation by foot pressure.

The invention has as its general object the provision of a portable exercising device of the type mentioned and which is desirably simple and yet durable in construction providing for a high degree of ease and facility in use.

The drawing shows preferred embodiments of the invention and such embodiments will be described, but it will be understood that various changes may be made from the constructions disclosed, and that the drawing and description are not to be construed as defining or limiting the scope of the invention, the claims forming a part of this specification being relied upon for that purpose.

Of the drawing:

FIG. 1 is a perspective view of the exercising device of the present invention showing a carrying case which forms a part thereof in a closed condition.

FIG. 2 is a view similar to FIG. 1 but showing the carrying case in an open condition with the exercising elements exposed.

FIG. 3 is a view similar to FIG. 2 but showing an alternative embodiment of the invention.

FIG. 4 is an enlarged sectional view taken generally as indicated at 4-4 in FIG. 3, and

FIG. 5 is an enlarged fragmentary sectional view taken generally as indicated at 5-5 in FIG. 4.

Referring particularly to FIGS. 1 and 2, it will be observed that the portable exercising device of the present invention comprises a carrying case 10. The case 10 may vary substantially in details of construction but preferably comprises a generally rectangular container having top and bottom walls 12, 14 and opposing side walls 16 and 18. A rear wall 20 is fixed to the top, bottom and side walls and a front wall 22 of the carrying case defines a door opening 24 of generally rectangular configuration. A door 26 is operatively associated with the opening 24 and is swingable relative thereto, preferably being connected with the lower or bottom wall 14 of the carrying case 10 by means of a piano-type hinge 28. A handle 30 is preferably also provided as are small feet 32, 32 on the door 26 and similar feet 34, 34 on the bottom wall 14. An appropriate latch 36 may also be provided to retain the door in its closed position.

In accordance with the present invention, an inclined pedal means is provided with one end portion adjacent an inner surface of the open door 26 when the latter resides in a prone position. As shown in FIG. 2, the said pedal means takes the form of a relatively wide and substantially flat member 38 which has a body portion extending angularly upwardly toward the carrying case from its said one end portion adjacent the door 26. Preferably the member 28 has left and right foot depressions 40, 40 formed therein so as to be adapted for operation by pressure of a single foot or by both feet simultaneously.

A means pivotally connecting the said one end portion of the pedal 38 to the door 26 comprises an elongated hinge 42 which is preferably provided with a readily removable pin so as to permit detachment of the pedal from the door. Thus, it may be desirable to detach the pedal 38 from the door 26 in closing the latter and storing the pedal within the carrying case 10. As constructed in FIG. 2, the pedal 38 has its inner or upper end portion spaced from the rear wall 20 of the carrying case a suffi-

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cient distance to swing through an arc within the carrying case and avoid interference with said rear wall and the bottom wall 14 on closing of the door 26.

Said upper opposite end portion of the pedal 38 is shown with spring means connected thereto and to the carrying case 10 and comprising four tension springs 44, 44. The springs 44, 44 may be connected by simple hooks 46, 46 at their lower end portions and by similar hooks (not shown) at upper end portions to the top wall 12 of the carrying case. Preferably, the springs are detachably connected in the position shown so as to be removable for a dual purpose. First, in certain constructions of the exercising device, it may be desirable to detach the springs to permit easy swinging movement of the pedal 38 to a storage position within the carrying case. Secondly, and perhaps of greater importance, tension springs may be added or removed so as to vary the amount or degree of foot pressure required to depress the pedal 38. Quite obviously, the springs serve as a biasing means on release of foot pressure to return the pedal to its upper position as shown.

In the alternative embodiment of FIGS. 3, 4 and 5, a carrying case 10a is substantially identical with the carrying case 10 described above. Thus, the case includes top and bottom walls 12a and 14a, side walls 16a and 18a, a rear wall 20a and a narrow front wall 22a defining a door opening 24a. A downwardly swingable door 26a may be hinged at 28a so as to support the pedal means of the exercising device.

In this embodiment, the pedal means comprises first and second or left and right foot pedals 50 and 52. The pedals are substantially identical except for depressions 54, 56 which may be provided in the upper surfaces thereof respectively for receiving left and right feet of the user. Hinges connecting the pedals 50, 52 are indicated generally at 58 and 60 respectively and such hinges preferably include readily removable pins to provide for detachable connection of the pedals with the door 26a.

Referring now to the upper or opposite end portions of the pedals 50, 52, it will be observed that a spring means associated therewith comprises a plurality of similar compression springs 62, 62 for each of the pedals 50, 52. A seat member 64, 64 shown mounted on each of the pedals 50, 52 is provided with small depressions or seats 66, 66 for the springs 62, 62. Similarly, small depressions 68, 68 are provided in the lower wall 14a of the carrying case. Thus, springs 62, 62 can readily be added to and removed from the respective pedals 50, 52 so as to adjust the foot pressure required for operation of the pedals.

From the foregoing, it will be apparent that the exercising devices of the present invention provide for a simple and yet highly effective exercising technique. The devices fulfill the object of simple and yet highly durable and dependable construction and moreover, are well suited in design to low cost quantity production.

The invention claimed is:

1. A portable exercising device comprising a carrying case adapted to rest on a floor surface or the like and having a door opening in one side thereof, a door operatively associated with said opening, means pivotally connecting said door to a lower portion of said carrying case to provide for a downward and outward swinging movement of the door to a substantially prone open position, inclined pedal means with one end portion adjacent an inner surface of said open door and with a body portion extending angularly upwardly therefrom toward said carrying case, means pivotally connecting said one end portion of said pedal means with the door, and spring means connected to an opposite end portion of said pedal means and to said carrying case whereby said pedal means can be selectively depressed under foot pressure and per-

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mitted to rise under spring pressure in an exercising activity.

2. A portable exercising device as set forth in claim 1 wherein said spring means is detachably connectable in position between said pedal means and said carrying case, folding of the pedal means to a position within the carrying case thus being provided for on closing movement of said door.

3. A portable exercising device as set forth in claim 1 wherein said means pivotably connecting said pedal means with the door is separable whereby the pedal means can be folded to a storage position within the carrying case on closing movement of the door.

4. A portable exercising device as set forth in claim 2 wherein said means pivotably connecting said pedal means with the door is separable whereby the pedal means can be folded to a storage position within the carrying case on closing movement of the door.

5. A portable exercising device as set forth in claim 1 wherein said spring means is adapted for individual replacement to vary the foot pressure required for movement of the pedal means.

6. A portable exercising device as set forth in claim 1 wherein said spring means includes a plurality of tension springs connected between said opposite end portion of said pedal means and an upper portion of said pedal means and an upper portion of said carrying case.

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7. A portable exercising device as set forth in claim 1 wherein said spring means comprises a plurality of compression springs disposed between said opposite end portion of said pedal means and a lower portion of said carrying case.

8. A portable exercising device as set forth in claim 7 including means holding said springs detachably in position for individual replacement to vary the foot pressure required for movement of the pedal means.

9. A portable exercising device as set forth in claim 1 wherein said pedal means comprises a single pedal substantially coextensive with but slightly smaller than said door opening.

10. A portable exercising device as set forth in claim 1 wherein said pedal means comprises first and second independently operable pedals and said spring means comprises at least one spring operatively connected to each pedal.

References Cited by the Examiner

UNITED STATES PATENTS

2,219,219	10/1940	Boger	272—83
2,830,816	4/1958	Uhl	272—83 X
2,837,334	6/1958	Long	272—68

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