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(54) **Exerciser adjustable for sidewise moving**

Für seitliche Bewegungen anpassbares Übungsgerät

Exerciseur réglable pour déplacement latéral

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Description

[0001] The invention relates to an exerciser adjustable for selectively operating as a striding exerciser or side-wise moving exerciser. More specifically, the invention relates to an exerciser according to the preamble portion of claim 1.

[0002] An exerciser of this type is known from US 2009/0203502 A1. Foot platforms are suspended via pairs of vertical solid stems from a frame. Motion can be restricted to one horizontal axis at a time by a switchable mechanism pivotal in one plane at a time such as a rotatable axle or two orthogonal axles in series that can be engaged alone or together or another switchable linear guiding mechanism. In the example of a directionally switchable joint, one setting may permit only lateral motion of the swinging stems, while the other permits only fore-aft motion of the swinging stems.

[0003] The invention is to provide an exerciser having a structure for selectively operating as a striding exerciser or a sidewise moving exerciser.

[0004] This technical problem is solved by an exerciser as defined in the claims.

FIG. 1 is a perspective view of an exerciser;

FIGS. 2, 3 are partial exploded views of the exerciser;

FIGS. 4, 5 are enlarged partial perspective views of the exerciser; and

FIGS. 6, 7, 8, 9, 10 are perspective views of the exerciser.

[0005] Referring to FIGS. 1-2, an exerciser comprises a base 10, an upright post 11 and an upright column 13 extended upwardly from the front portion 12 and the rear portion 14 of the base 10, a handle 15 attached to the post 11, and a hand grip 16 attached between the post 11 and the column 13. A lever 17 is extended from the upper portion of the post 11 and perpendicular to the post 11, a shaft 18 extended from the upper portion of the column 13 and perpendicular to the column 13. A control device 19 is mounted on the post 11 or the column 13 for displaying various data or information of the exerciser and/or the user.

[0006] Two cylindrical anchors 20 are attached to the end portions 171 of the lever 17 and each include a bore 21 (FIGS. 2-5), and a duct 22 extended from the anchor 20 and having a bore 23 for receiving a spring-biased projection 24 which is partially extended into the bore 21 of the anchor 20 (FIGS. 4, 5). The anchors 20 are perpendicular to the lever 17, and the bore 21 of the anchor 20 is opened upwardly and downwardly relative to the base 10 and the lever 17. Two U-shaped brackets 30 each include a stem 31 engaged through the bore 21 of the anchor 20, and two or more notches 32, 33 ninety (90) degrees apart from each other for engaging with the

projection 24 which may be engaged with either notch 32, 33 of the stem 31 for positioning the stem 31 of the bracket 30 to the anchor 20 and the lever 17 of the post 11 at different angular positions.

[0007] A sleeve 34 and/or a knob 35 may be attached to the stem 31 for anchoring the anchor 20 between the bracket 30 and the sleeve 34, and for rotating the stem 31 of the bracket 30 relative to the anchor 20 to the different angular positions. The bracket 30 may be pivoted relative to the lever 17 and the post 11 between a first or forward position (FIGS. 1, 4, 6-7) and a second or side-wise position (FIGS. 5, 8-10) which are ninety (90) degrees apart from each other. Two foot supports 50 each include a beam 51 having a foot pedal 52, a link 53 having a lower portion 54 attached to the front portion 55 of each beam 51 with a coupler 56, and an upper portion 57 attached to the bracket 30 with an axle 58 for allowing the beam 51 and the link 53 to be swung relative to the bracket 30 and the lever 17 and the base 10 (FIGS. 1, 6-10). The coupler 56 may be pivoted relative to the beam 51 when the link 53 and the bracket 30 are pivoted relative to the lever 17 and the post 11 between the first or forward position and the second or sidewise position.

[0008] The foot supports 50 each include a rod 60 having a lower portion 61 attached to the rear portion 59 of the beam 51 and an upper portion 62 attached to the shaft 18. Two barrels 63 are attached to the shaft 18, and the upper portion 62 of the rod 60 is attached to the barrel 63 with a pin 64 which is perpendicular to the barrel 63 for allowing the rod 60 and the beam 51 and the foot pedals 52 of the foot support 50 to be pivoted or swung relative to the shaft 18 and the column 13 and the base 10 either forwardly and rearwardly with the barrel 63 or sidewise with the pin 64.

[0009] In operation, as shown in FIGS. 1, 6-7, when the bracket 30 is attached to the anchor 20 and the lever 17 at the first or forward position (FIG. 4), the links 53 and the beams 51 and the rods 60 and the foot pedals 52 of the foot support 50 may be pivoted or swung forwardly and rearwardly relative to the lever 17 and the base 10 for striding exercises (FIGS. 1, 6-7). As shown in FIG. 5, the bracket 30 may be adjusted to the anchor 20 and the lever 17 at the second or sidewise position with the knob 35, at this moment, the links 53 and the beams 51 and the rods 60 and the foot pedals 52 of the foot support 50 may be pivoted or swung sidewise relative to the lever 17 and the base 10 for splitting (FIG. 8) or sidewise swinging exercises (FIGS. 9, 10).

[0010] The links 53 and the beams 51 may be pivotally secured together with the brackets 56 for allowing the brackets 56 and the links 53 to be adjusted relative to the beam 51, and the rod 60 and the beam 51 and the foot pedals 52 of the foot support 50 may be swung relative to the shaft 18 and the column 13 and the base 10 either forwardly and rearwardly with the barrel 63 or side-wise with the pin 64.

Claims

1. An exerciser comprising:

a base (10), and
two foot supports (50) connected with the base (10) to be swung forwardly and rearwardly relative to the base (10) and to be swung sidewise relative to the base (10),
characterized in that:

the base (10) includes a post (11) having two anchors (20), wherein the anchors (20) each include a bore (21),
two brackets (30) are attached to the post (11) via the anchors (20),
wherein the brackets (30) each include a stem (31) for engaging with the bore (21) of the anchor (20), respectively, and two notches (32, 33) ninety degrees apart from each other for engagement with a spring-biased projection (24) of the anchors (20), for adjustment of the brackets (30) relative to the post (11) between a first and forward position and a second and sidewise position, and
the foot supports (50) are pivotally attached to the brackets (30).

2. The exerciser as claimed in claim 1, wherein the post (11) includes a lever (17) for supporting the brackets (30).

3. The exerciser as claimed in claim 1 or 2, wherein the bracket (30) includes a knob (35) engaged with the stem (31) of the bracket (30).

4. The exerciser as claimed in one of claims 1 to 3, wherein the foot supports (50) each include a beam (51), a foot pedal (52) disposed on the beam (51), and a link (53) coupled between the beam (51) and the bracket (30).

5. The exerciser as claimed in claim 4, wherein the base (10) includes a column (13), and the foot supports (50) each include a rod (60) coupled between the beam (51) and the column (13).

6. The exerciser as claimed in claim 5, wherein the base (10) includes a shaft (18) extended from the column (13), and two barrels (63) attached to the shaft (18) and pivotally attached to the rod (60) with a pin (64).

7. The exerciser as claimed in one of claims 4 to 6, wherein the link (53) is coupled to the beam (51) with a coupler (56).

Patentansprüche

1. Trainingsgerät, umfassend:

eine Basis (10), und
zwei Fußstützen (50), die so mit der Basis (10) verbunden sind, dass sie relativ zu der Basis (10) nach vorne und hinten schwenkbar sind und relativ zu der Basis (10) zur Seite schwenkbar sind,
dadurch gekennzeichnet, dass
die Basis (10) einen Ständer (11) mit zwei Ankern (20) aufweist, wobei die Anker (20) jeweils eine Bohrung (21) aufweisen,
zwei Halteklammern (30) über die Anker (20) an dem Ständer (11) befestigt sind, wobei die Halteklammern (30) jeweils einen Bolzen (31) zum Eingriff mit der Bohrung (21) des jeweiligen Ankers (20) aufweisen, und zwei Aussparungen (32, 33), die mit neunzig Grad Abstand zueinander angeordnet sind, zum Eingriff mit einem federbelasteten Vorsprung (24) der Anker (20), zur Einstellung der Halteklammern (30) relativ zu dem Ständer (11) zwischen einer ersten Vorwärtsposition und einer zweiten Seitwärtsposition, und
die Fußstützen (50) schwenkbar an den Halteklammern (30) angebracht sind.

2. Trainingsgerät nach Anspruch 1, wobei der Ständer (11) einen Balken (17) zum Tragen der Halteklammern (30) aufweist.

3. Trainingsgerät nach Anspruch 1 oder 2, wobei die Halteklammer (30) einen Stift (35) aufweist, der mit dem Bolzen (31) der Halteklammer (30) in Eingriff steht.

4. Trainingsgerät nach einem der Ansprüche 1 bis 3, wobei die Fußstützen jeweils einen Träger (51) aufweisen, ein Fußpedal (52), das auf dem Träger (51) angeordnet ist, und eine Verbindungsstange (53), die zwischen dem Träger (51) und der Halteklammer (30) angeordnet ist.

5. Trainingsgerät nach Anspruch 4, wobei die Basis (10) eine Säule (13) aufweist und die Fußstützen (50) jeweils eine Stange (60) aufweisen, die zwischen dem Träger (51) und der Säule (13) angeordnet ist.

6. Trainingsgerät nach Anspruch 5, wobei die Basis (10) einen Schaft (18) aufweist, der sich von der Säule (13) erstreckt, und zwei Hülsen (63), die an dem Schaft (18) befestigt sind und mit einem Stift (64) drehgelenkig an der Stange (60) befestigt sind.

7. Trainingsgerät nach einem der Ansprüche 4 bis 6,

wobei die Verbindungsstange (53) mithilfe eines Befestigungselements (56) an dem Träger (51) befestigt ist.

4 à 6, la liaison (53) étant couplée à la poutre (51) avec un coupleur (56).

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Revendications

1. Dispositif d'exercice comprenant :

une base (10) et 10
deux supports de pied (50) reliés à la base (10)
pour être pivotés vers l'avant et vers l'arrière par
rapport à la base (10) et pour être pivotés laté-
ralement par rapport à la base (10),
caractérisé en ce que la base (10) comprend 15
un montant (11) qui a deux ancrages (20), les
ancrages (20) comprenant chacun une forure
(21),
deux équerres (30) sont fixées au montant (11)
par l'intermédiaire des ancrages (20), les équer- 20
res (30) comprenant chacune une tige (31) pour
se mettre respectivement en prise avec la forure
(21) de l'ancrage (20) et deux encoches (32, 33),
espacées de quatre vingt dix degrés l'une de 25
l'autre pour être en prise avec une saillie char-
gée par ressort (24) des ancrages (20), pour
l'ajustage des équerres (30) par rapport au mon-
tant (11) entre une première position en avant
et une seconde position latérale et les supports 30
de pied (50) étant attachés en pivotement aux
équerres (30).

2. Dispositif d'exercice selon la revendication 1, le mon-
tant (11) comprenant un levier (17) pour supporter
les équerres (30). 35

3. Dispositif d'exercice selon la revendication 1 ou 2,
l'équerre (30) comprenant un bouton (35) en prise
avec la tige (31) de l'équerre (30). 40

4. Dispositif d'exercice selon l'une des revendications
1 à 3, les supports de pied (50) comprenant chacun
une poutre (51), une pédale (52) disposée sur la pou-
tre (51) et une liaison (53) couplée entre la poutre
(51) et l'équerre (30). 45

5. Dispositif d'exercice selon la revendication 4, la base
(10) comprenant une colonne (13) et les supports
de pied (50) comprenant chacun une barre (60) cou-
plée entre la poutre (51) et la colonne (13). 50

6. Dispositif d'exercice selon la revendication 5, la base
(10) comprenant un arbre (18) qui s'étend à partir
de la colonne (13) et deux fûts (63) attachés à l'arbre
(18) et attachés en pivotement à la barre (60) avec 55
une broche (64).

7. Dispositif d'exercice selon l'une des revendications

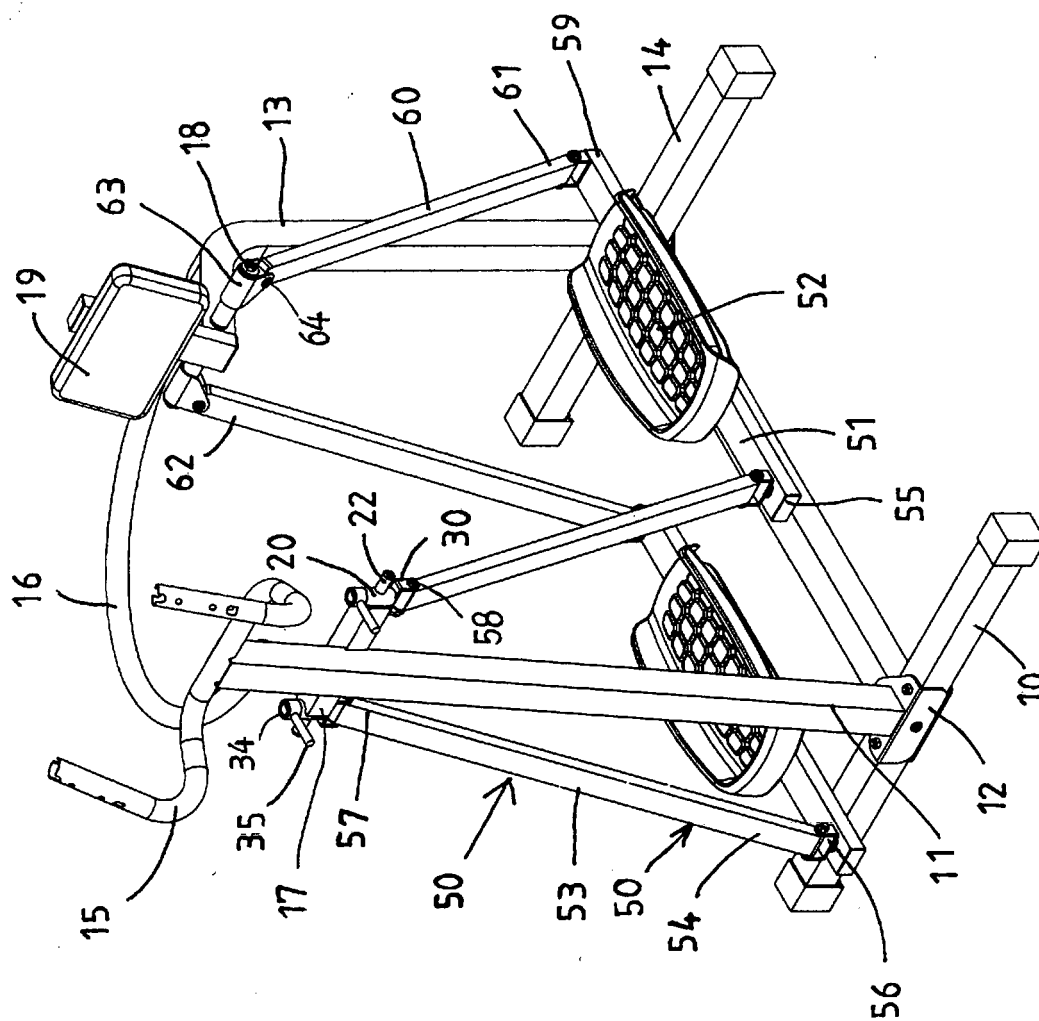


FIG. 1

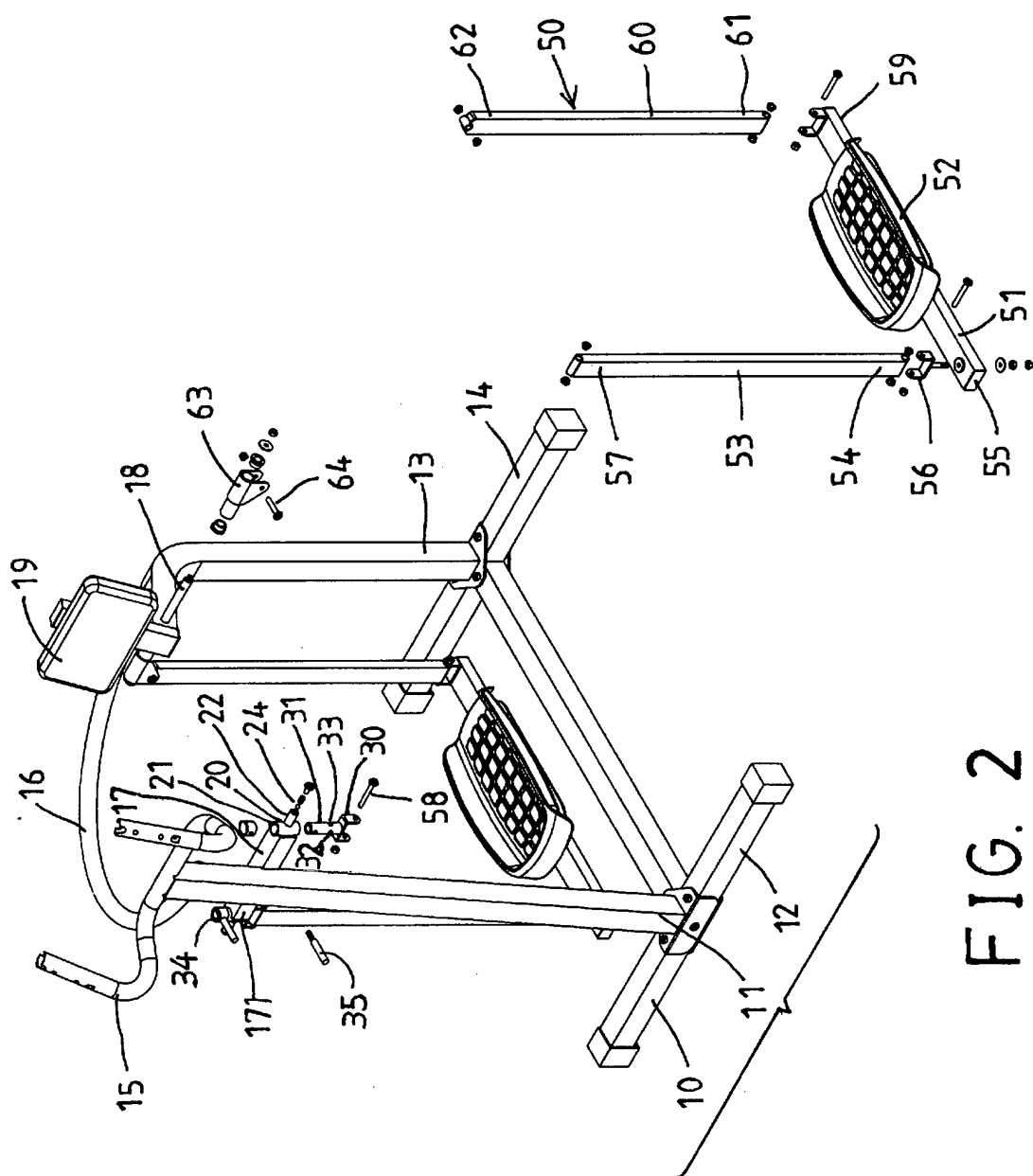


FIG. 2

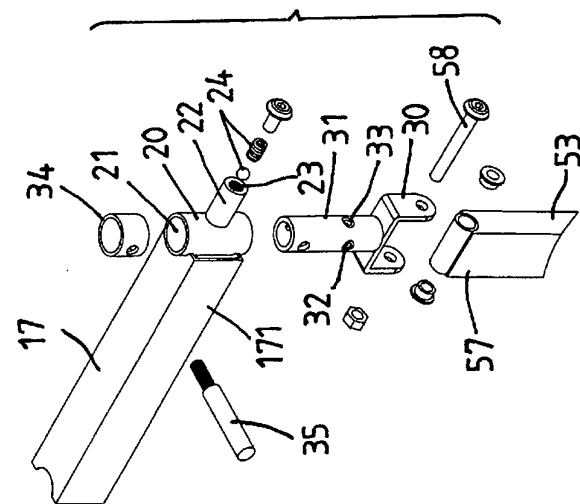


FIG. 3

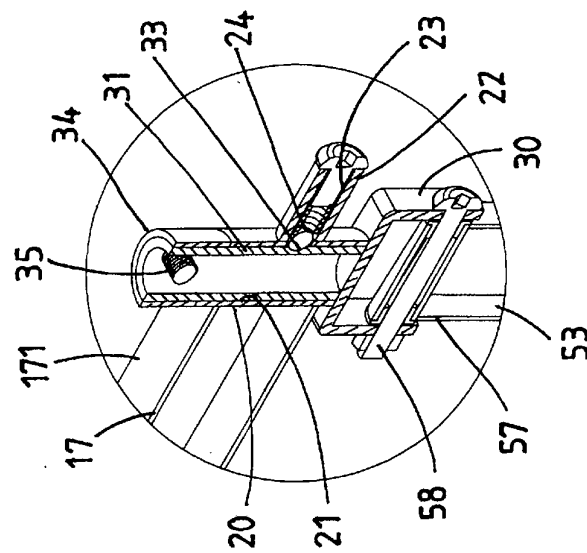


FIG. 4

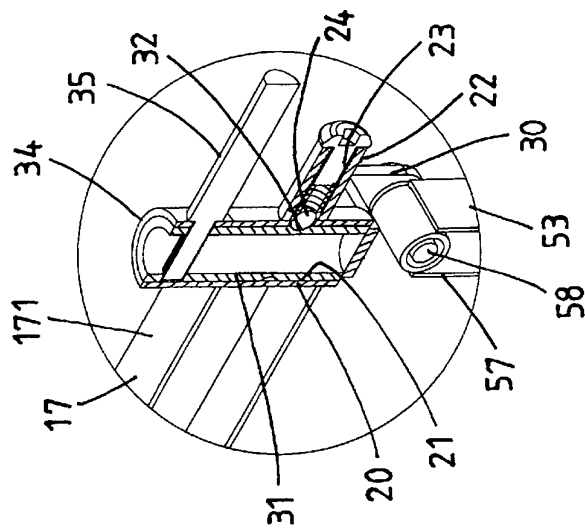


FIG. 5

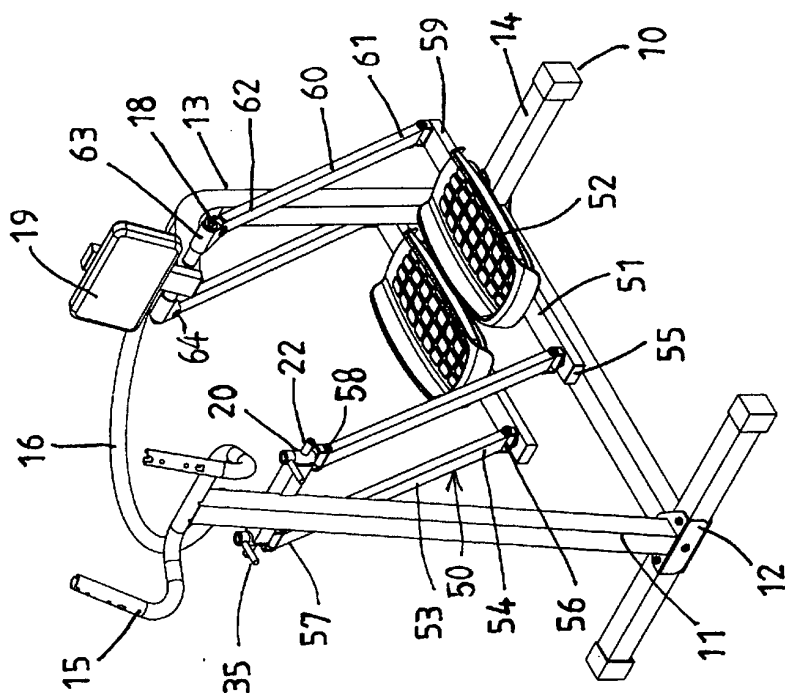


FIG. 7

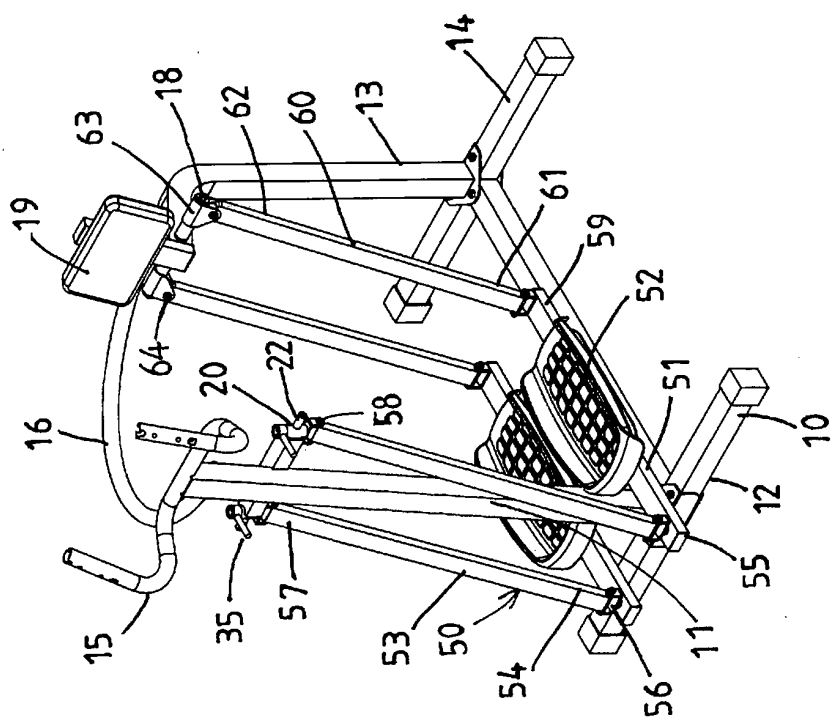


FIG. 6

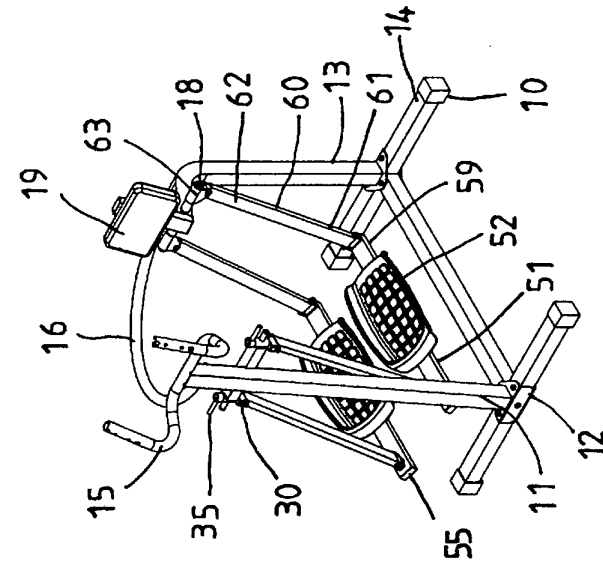


FIG. 8

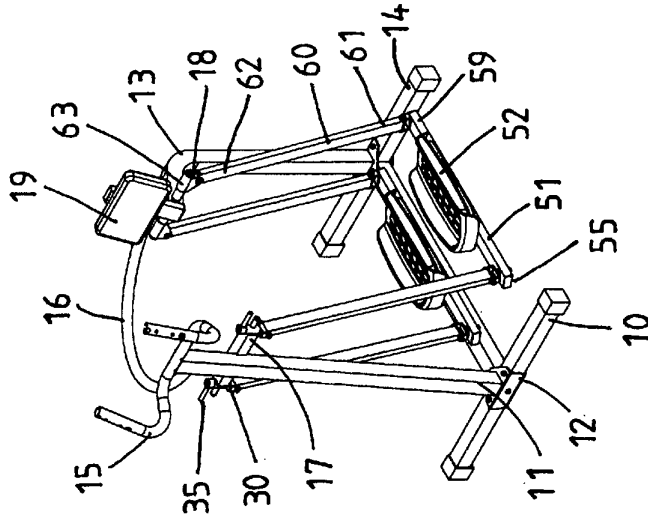


FIG. 9

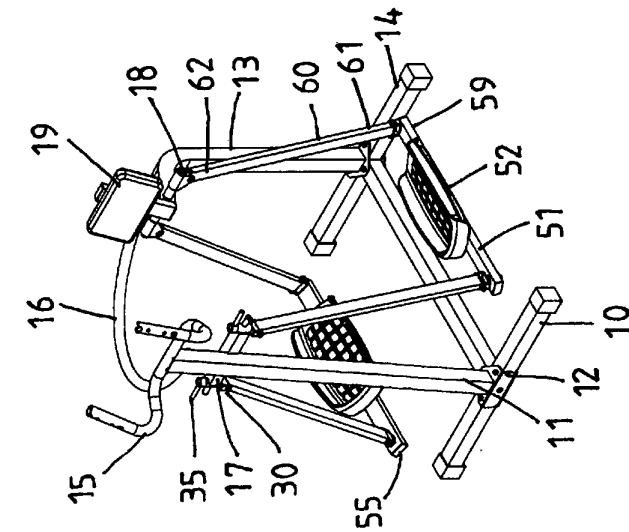


FIG. 10

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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