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ONE PERSON SEESAW

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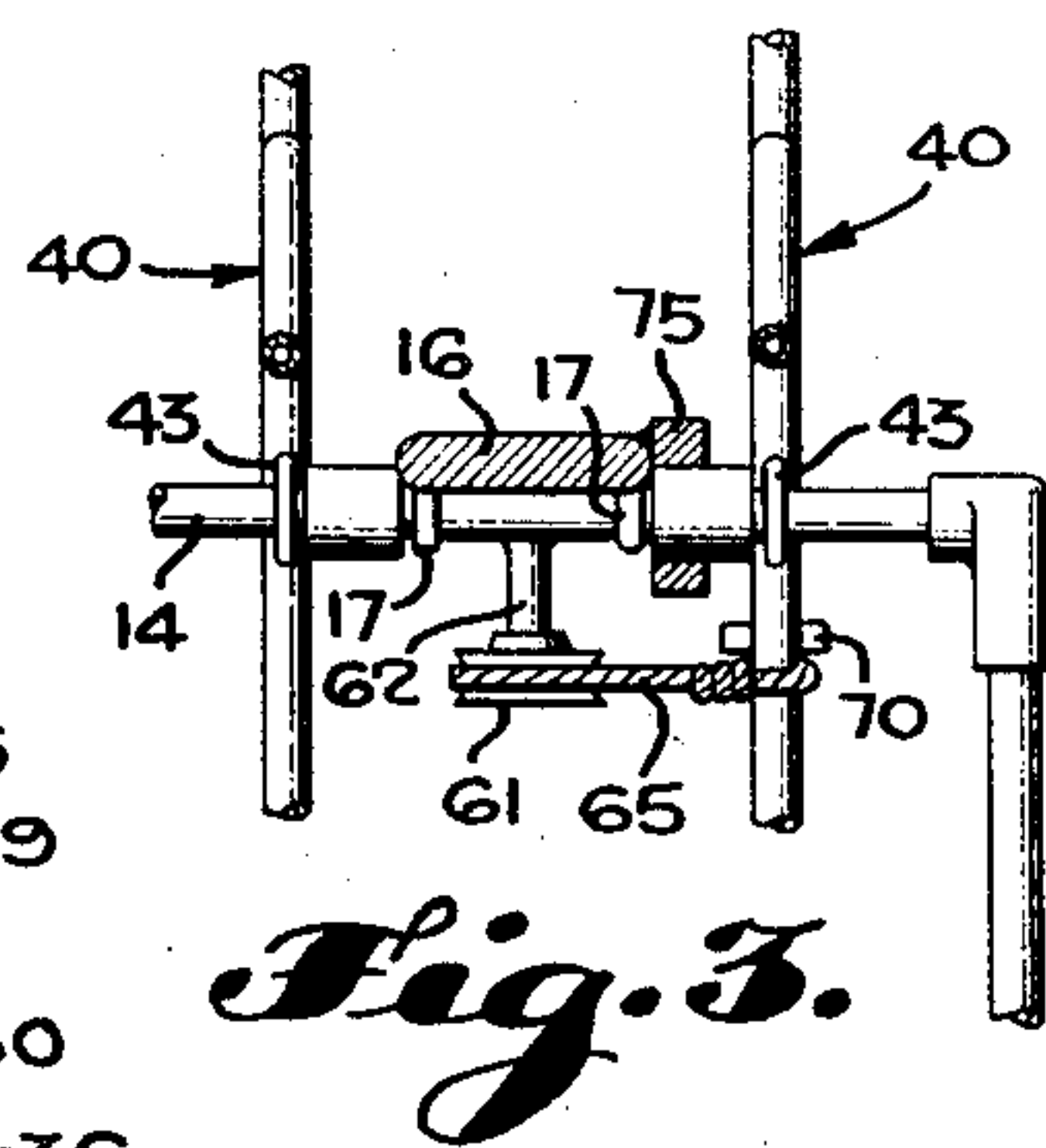
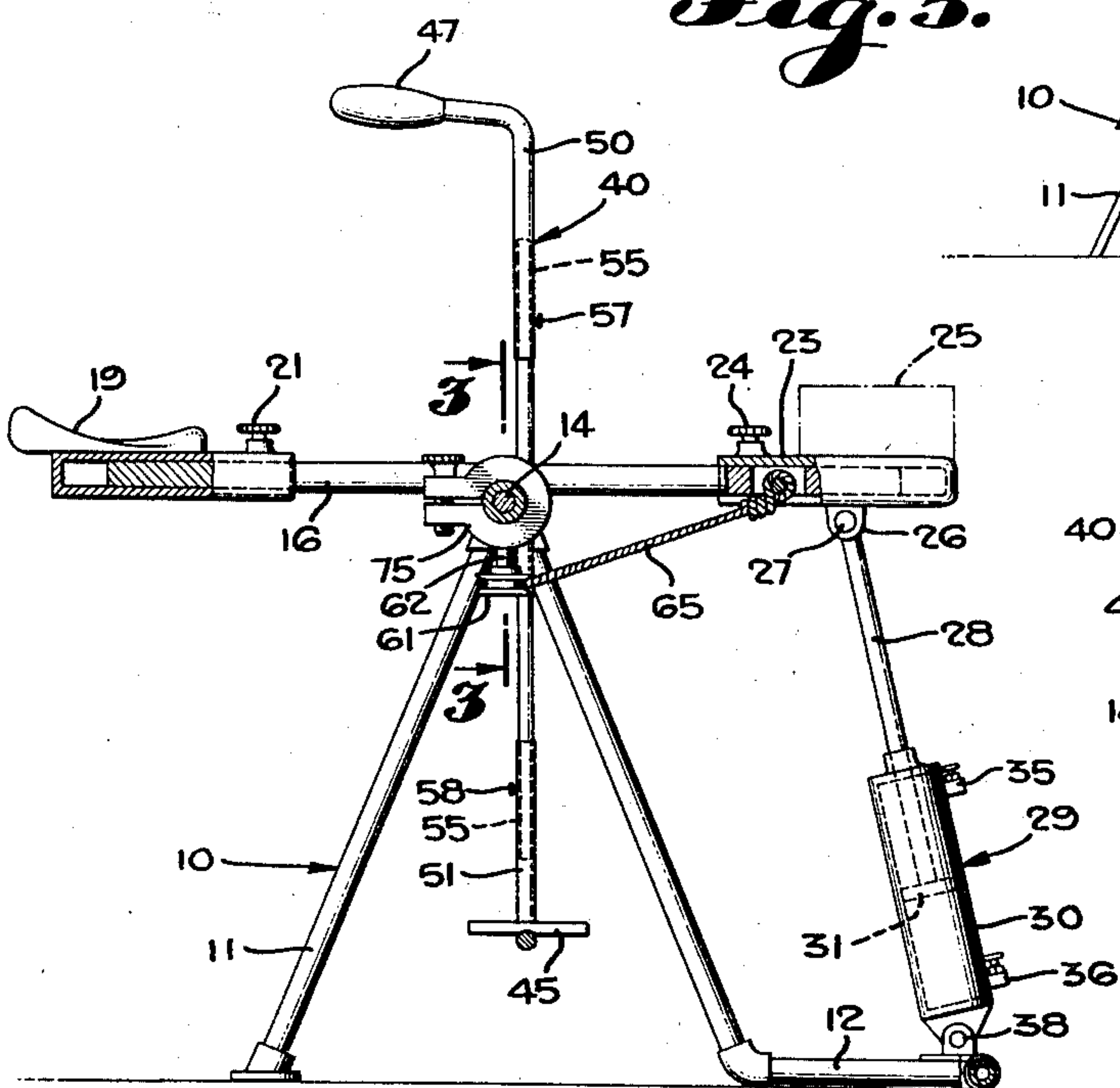
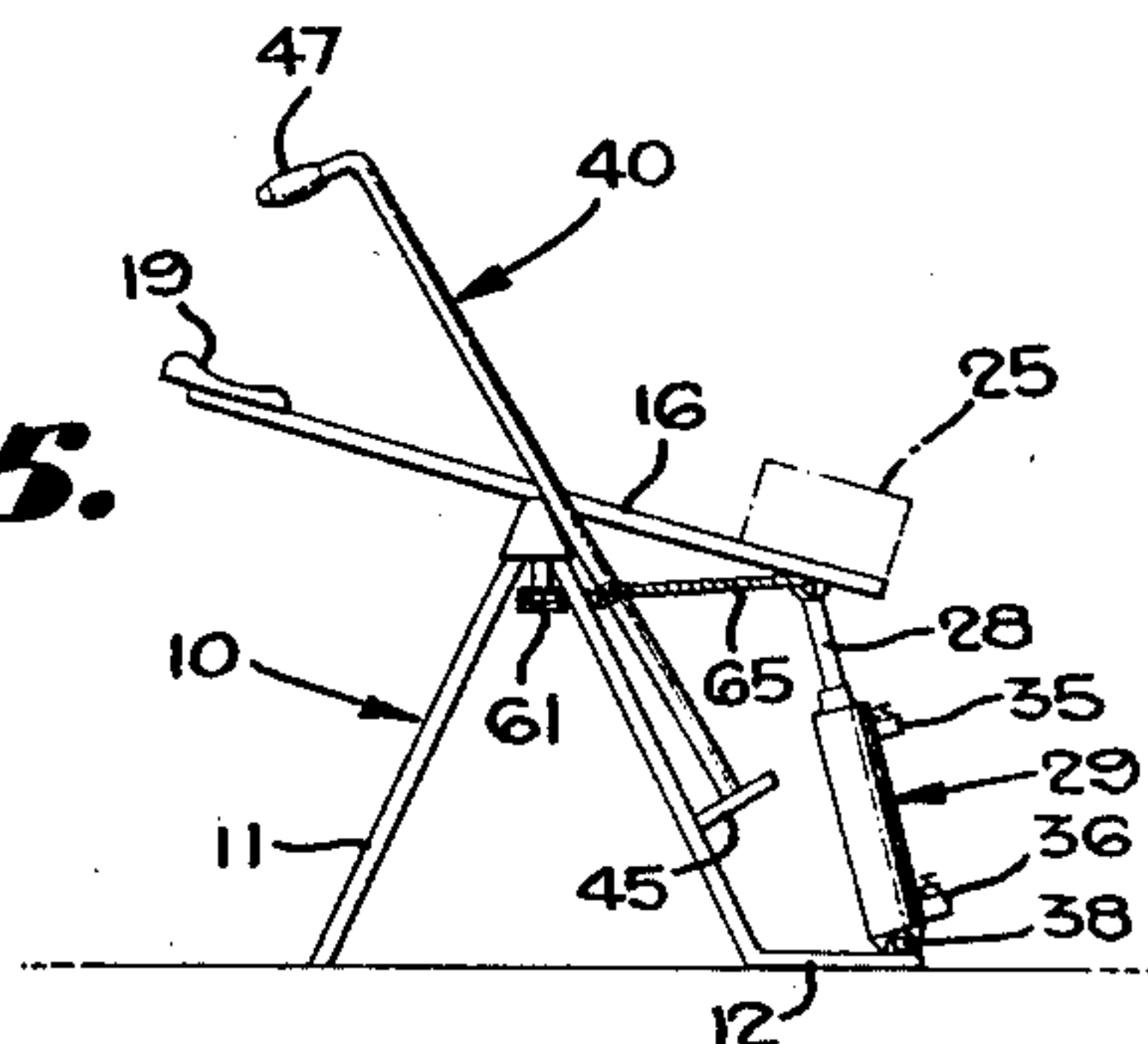
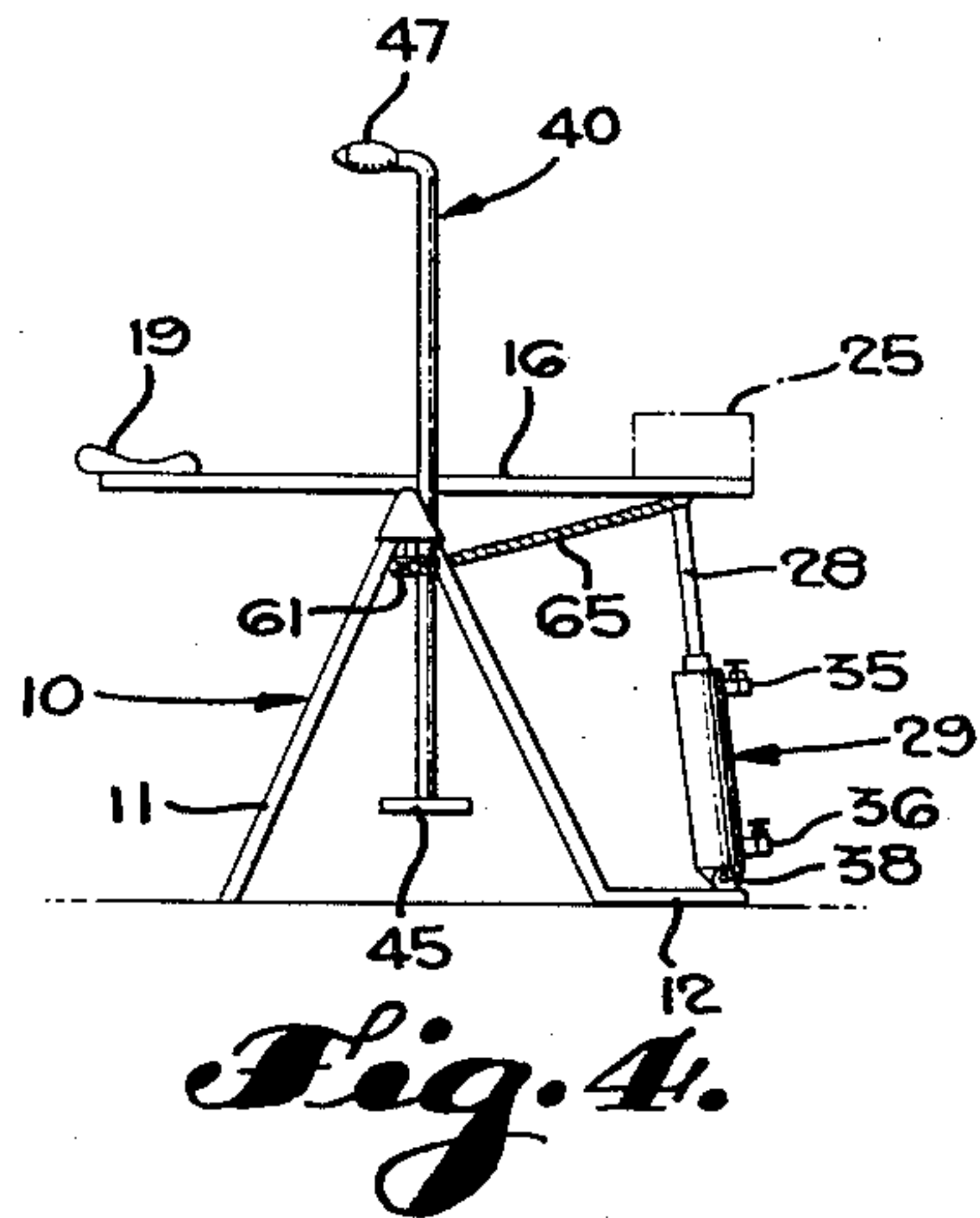
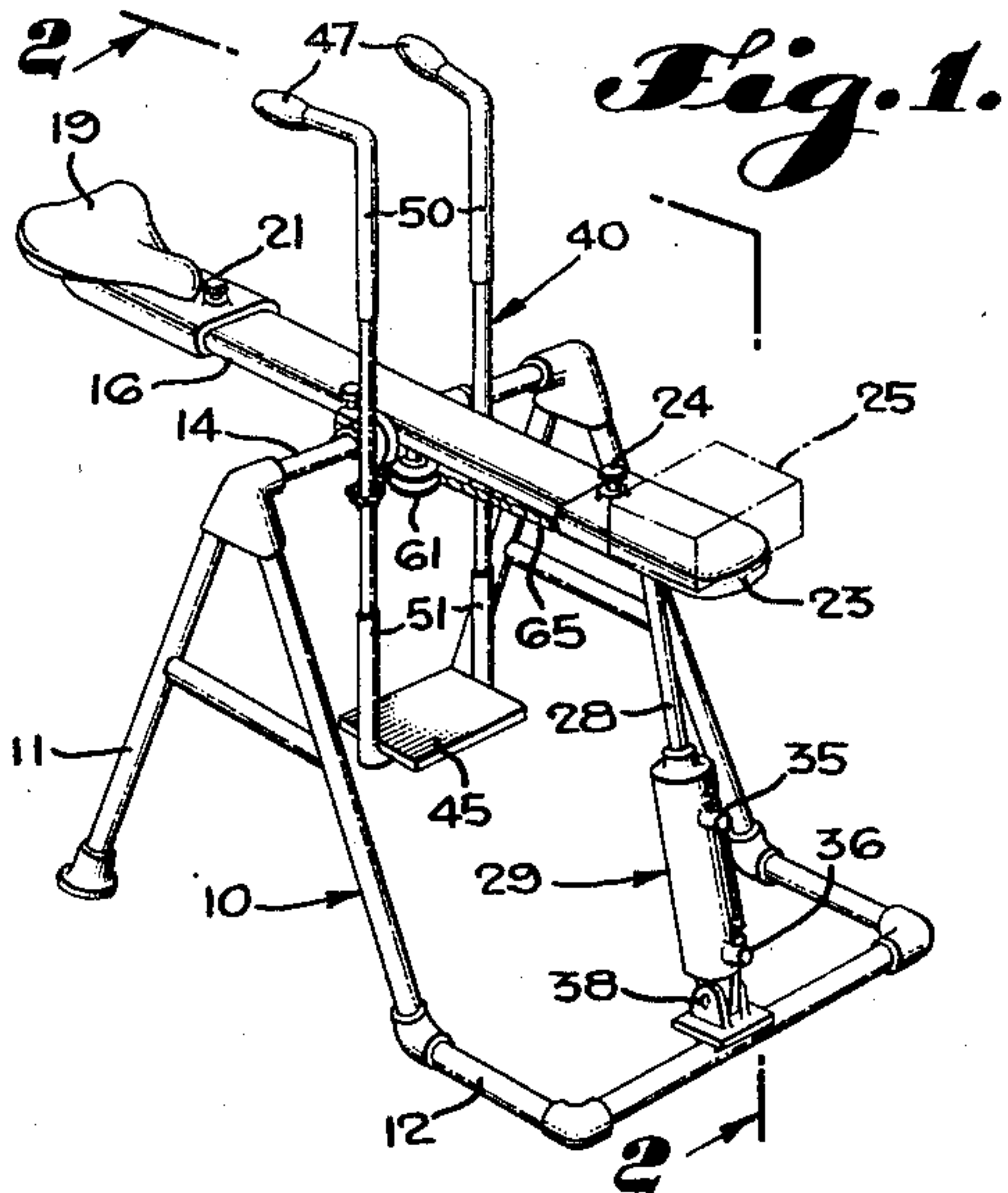


Fig. 2.

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ONE PERSON SEESAW

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4 Claims. (Cl. 272—55)

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This invention relates to new and useful improvements in exercising devices.

A main object of the present invention is to provide a simple inexpensive and reliable exercising device, or healthcycle.

Another object of this invention is to provide a novel exercising device including a seesaw wherein there is a vertical member pivoted at approximately the fulcrum of the seesaw which vertical member is adapted to be oscillated by the rider on the seesaw and in which exercising device there are means operatively connecting the vertical member and the horizontal member of the seesaw so that the vertical member and horizontal member oscillate in unison.

Another object of the present invention is to provide an exercising device as above described in which the vertical member provides a foot rest at its lower end to receive the feet of the rider and provided with handles at its upper end to be grasped by the rider so that the vertical member may be oscillated by the rider.

Another object of the present invention is to provide a device as above described in which there are means for at least partially counterbalancing the rider and preferably completely counterbalancing the rider.

Another object of this invention is to provide a toy, plaything, or amusement device for children on which the children may play. Such a device can be used around the home as well as on playgrounds.

With the foregoing and other objects in view, which will be made manifest in the following detailed description and specifically pointed out in the appended claims, reference is had to the accompanying drawings for an illustrative embodiment of the invention, wherein:

Fig. 1 discloses a perspective view of the exercising device embodying the concepts of the present invention;

Fig. 2 discloses a sectional view in side elevation of the exercising device shown in Fig. 1 along lines 2—2 of Fig. 1;

Fig. 3 is a vertical sectional view along lines 3—3 of Fig. 2 showing the manner of pivoting the horizontal and vertical members of the seesaw; and

Figs. 4 and 5 are illustrations of two positions in which the exercising device may be moved.

Referring to the accompanying drawings wherein similar reference characters designate similar parts throughout, an exercising device embodying the concepts of the present invention is shown in Fig. 1 wherein there is a stand gener-

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ally entitled 10 having feet 11 and 12 and a fulcrum or pivot bar 14 about which the horizontal member 16 of a seesaw is pivoted by any suitable means such as by U bolts 17, see Fig. 3.

5 The horizontal member 16 of the seesaw has a seat generally entitled 19 adapted to slip over one end thereof so as to be adjustable back and forth along member 16 and to be set in a particular position by lock means which may comprise a locking screw 21.

10 Although the device of the present invention may be used by two riders at the same time in which case a seat similar to seat 19 would be provided on the opposite end of the horizontal member 16 but, in other cases it is desirable to have only one rider on the exercising device at which time it will be desirable to at least partially or completely counterbalance the weight of the rider. This counterbalancing may take any of a number of forms. One form as shown in the drawing may comprise a member 23 which slips over the end of horizontal member 16 and member 23 is provided with locking means 24 so as to set member 23 in a definite position along horizontal member 16. A weight indicated in dot dash lines at 25 may be fastened onto member 23 by any suitable means so as to counterbalance the weight of the rider or, the member 23 may be provided with a clevis 26 having a pivot pin 27 on which is mounted a piston rod 28 of a hydraulic counterbalancing means 29. The hydraulic counterbalancing means 29 has a cylinder 30, a piston 31 connected to piston rod 28 and has upper and lower valves 35 and 36 by which the amount of air escaping from or entering into cylinder 30 may be regulated, cylinder 30 being pivotally mounted at 38 to foot 12 of frame 10 of the exercising device, or healthcycle.

35 The valves 35 and 36 will be adjusted so that the hydraulic system counterbalances the weight of the rider.

Other ways of partially or completely counterbalancing the weight of the rider are by spring means or elastic means such as rubber or cord or any other suitable means which would suggest themselves to the mechanic.

45 There is a vertical U-shaped member 40 pivotally mounted as by U bolts 43 to pivot bar or fulcrum 14 and vertical member 40 provides a foot rest 45 on which the feet of the rider may rest and at its upper end vertical member 40 provides handles 47 which the rider may grasp. In case two riders are to use the exercising device at one time, that is, one on either side of the horizontal member 16, foot rest 45 could be used or a modified

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foot rest could be used and if two riders were going to use the exercising device the vertical member 40 would also provide handles similar to handles 47 but extending oppositely from handles 47 for use by the second rider.

It is preferable that the top portions of the legs comprising vertical member 40 be adjustable with respect the center portions of the legs of member 40 and this can be provided in any suitable manner such as by forming the legs of tubes with extensions 50 on the upper ends of the legs of vertical member 40 and extensions 51 on the lower ends of the legs of vertical member 40. Rods, bars or the like generally entitled 55 may be fixed within the center portions of the legs of vertical member 40 and extend into the extensions 50 and 51 so that the extensions may be adjusted along the rods or bars 55 and suitable locking means generally entitled 57 and 58 may be provided for extensions 50 and 51 to lock these extensions in adjusted position.

Means are provided on the exercising device so that whenever the vertical member is oscillated by the rider that the horizontal member of the seesaw will be oscillated in unison therewith and these means may take a number of forms one which is shown in the drawings. These means as shown in the drawings comprise a pulley 61 rotatably mounted on a stub shaft 62 which stub shaft is fixed to pivot bar or fulcrum 14. A cable, rope, wire or the like generally entitled 65 is passed around rotatable pulley 61 and fastened to one of the legs of the vertical member 40 at one end thereof and to the right hand end of horizontal member 16 as the horizontal member is depicted in Fig. 2 and the adjustable member 23 may be slotted down its center to pass over the cable means 65 so that adjustment of member 23 does not affect the length of the cable means 65. An adapter sleeve 70 may be fastened above cable means 65 on the right hand leg of vertical member 40 as the member is depicted in Fig. 3 so as to insure that the cable means will not slip. It is preferable that some means such as a sleeve lock 75, see Figs. 2 and 3, be provided for locking the horizontal member 16 in position whenever the device is not in use so that if the counterweight 25 is used there will be no damage to the exercising device or no injury to the rider when the rider dismounts from the exercising device. The sleeve lock 75 is fastened to horizontal member 16 by any suitable means such as welding, soldering, braces, brackets, screws or the like.

It will be appreciated, that whenever the counterweight 25 is used with the machine that only one rider will be using the machine and that there will be no need to use the hydraulic counterbalancing system and whenever the hydraulic counterbalancing system is to be used there will be no need for the counterweight 25, on the machine or healthcycle.

Although a cable and pulley means is shown as adapted to connect the vertical and horizontal member of the exercising device so that they oscillate in unison it will be appreciated that a simple gear system could be provided for accomplishing the same purpose or a leverage system could be used in place of the cable and pulley means as shown in the drawings and the invention is not intended to be limited to a cable and pulley means unless it is specifically pointed out in the appended claims. It is also contemplated that instead of being merely manually operated, that the exercising device of the present invention could have a motor or other prime mover

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operatively connected to the exercising device so that the device need not be manually operated but can be operated through the motor or prime mover.

Fig. 4 of the drawings discloses the exercising device in what may be termed the rest position. When the rider of the exercising device pushes the foot rest 45 away from him and pulls the handles 47 toward him the vertical member 40 will move to the position shown in Fig. 5 thereby pulling the cable means 65 around the pulley 61 thereby pulling the right hand end of the horizontal member 16 downwardly as the right hand member is depicted in Fig. 5 thereby raising the left hand end of the horizontal member on which the rider is seated and then the rider may push the handles 47 away from him and may be able to draw the foot rest toward him with his feet though this is not necessary which operations will bring the vertical member 40 back to the position shown in Fig. 4 and the above operations may be repeated.

By the present invention, then, an exercising device is provided which is adapted to be used by either one or two persons whichever is desirable; by merely removing the member 23 and inserting a seat member 19 two riders may use the exercising machine; however, if the member 23 is used and the counterweight placed on the member 23 then one rider may use the device and that whenever the rider wants to leave the device he may manipulate the sleeve lock 75 and lock the horizontal member 16 in approximately horizontal position so that the counterweight 25 will not throw the left hand end of the horizontal member 16 upwardly and therefore the weight 25 may be left on the exercising device at all times if one rider only is intending to use the device. It is obvious that the adjustable member 23 allows partial or complete counterbalancing of the rider. However, if an energetic person prefers to get an extreme amount of exercise he may do so without using any counterweight but it will be realized in such case he would have to be strong enough to hold his own weight while manipulating the device or healthcycle.

By the present invention an exercising device is provided which is exceedingly simple and can be manufactured quickly and easily with a minimum amount of expense. By the present invention existing seesaws can be adapted to be used as an exercising device or healthcycle.

The term "healthcycle" has been used throughout the specification to describe the exercising device or toy of the present invention and this term is appropriate since it will be appreciated that when operating the device, all of the muscles of the body are used which are used in rowing, cycling, or horseback riding, and many other exercises. This combination of exercising movements improve the health of the users of the device and hence the term "healthcycle."

Various changes may be made in the details of construction without departing from the spirit and scope of the invention as defined by the appended claims.

I claim:

1. In combination with a seesaw having an oscillatable seat-carrying horizontal member, a vertical member pivotally mounted at the fulcrum of the seesaw independently of the horizontal member, the vertical member extending below the fulcrum of the seesaw and providing a footrest at the lower end thereof on which the feet of the rider may be placed and the vertical

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member extending above the fulcrum of the seesaw providing holds adapted to be grasped by the rider whereby the vertical member may be oscillated by forces on the upper and lower portions of the vertical member, and means connecting the vertical member and the horizontal member for causing the horizontal member to be oscillated when the vertical member is oscillated.

2. In combination with a seesaw having an oscillatable seat-carrying horizontal member, a vertical member pivotally mounted at the fulcrum of the seesaw independently of the horizontal member, the vertical member extending below the fulcrum of the seesaw and providing a footrest at the lower end thereof on which the feet of the rider may be placed and the vertical member extending above the fulcrum of the seesaw providing holds adapted to be grasped by the rider whereby the vertical member may be oscillated by forces on the upper and lower portions of the vertical member, means connected to the horizontal member opposite the seat end for at least partially counterbalancing the weight of the rider, and means connecting the vertical member and the horizontal member for causing the horizontal member to be oscillated when the vertical member is oscillated, the last-named means being connected to the horizontal member at a point spaced from the pivotal axis thereof, said last-named means being connected to the vertical member at a point spaced from the pivotal axis thereof.

3. In combination with a seesaw having an oscillatable seat-carrying horizontal member, a vertical member pivotally mounted at the fulcrum of the seesaw independently of the horizontal member, the vertical member extending below the fulcrum of the seesaw and providing a

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footrest at the lower end thereof on which the feet of the rider may be placed and the vertical member extending above the fulcrum of the seesaw providing holds adapted to be grasped by the rider whereby the vertical member may be oscillated by forces on the upper and lower portions of the vertical member, and means connecting the bottom portion of the vertical member and the side of the horizontal member opposite the seat side for causing the horizontal member to be oscillated when the vertical member is oscillated.

4. In combination with a seesaw having an oscillatable seat-carrying horizontal member, a vertical member pivotally mounted at the fulcrum of the seesaw independently of the horizontal member and adapted to be oscillated by the rider, means connected to the side of the horizontal member opposite the rider for at least partially counterbalancing the weight of the rider, pulley means mounted adjacent the fulcrum of the seesaw, and cable means connected to the horizontal member and to the vertical member and passing around the pulley means for causing the horizontal member to oscillate in unison with oscillation of the vertical member.

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