

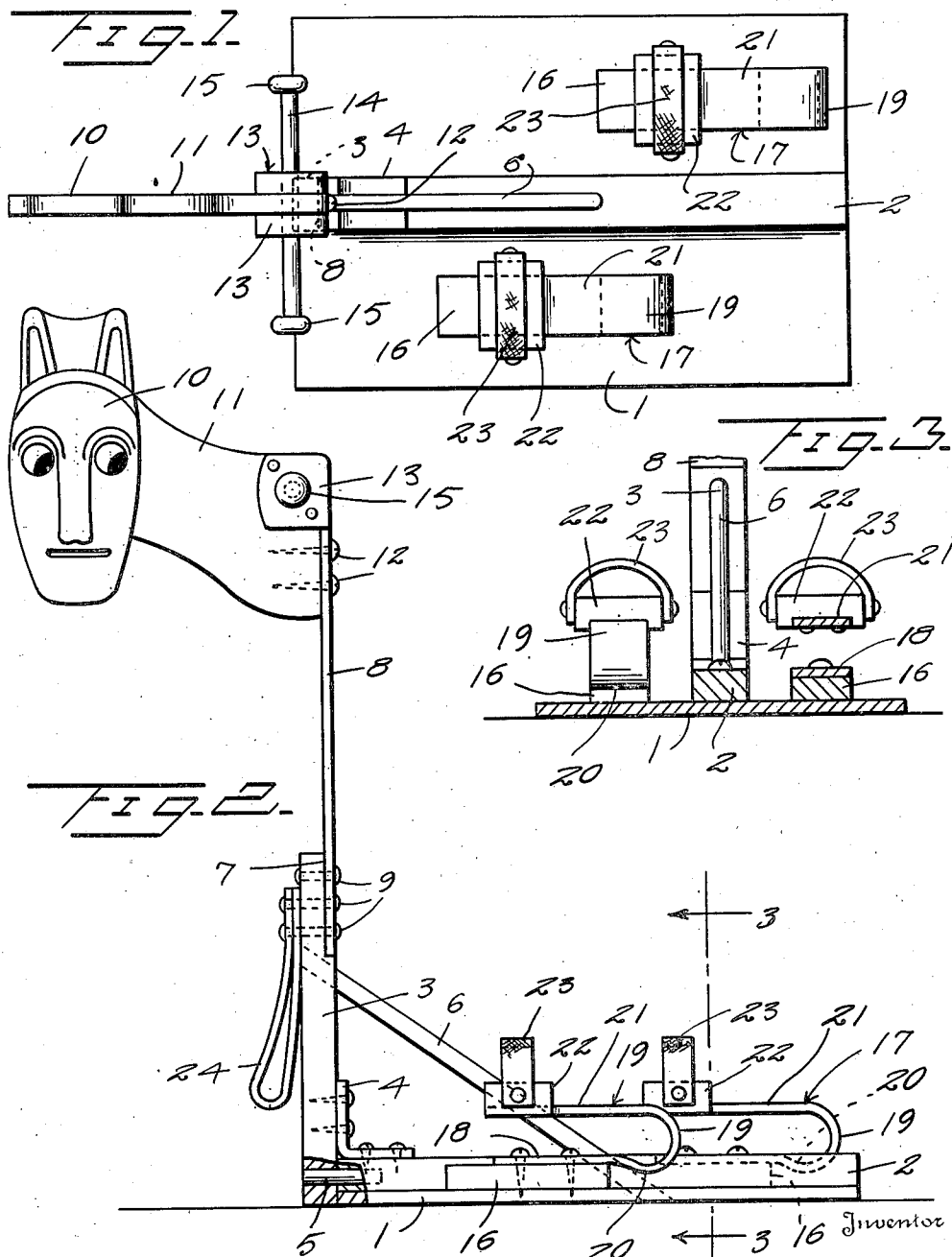
May 16, 1944.

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2,348,747

MECHANICAL EXERCISING HORSE

Filed Aug. 9, 1943



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UNITED STATES PATENT OFFICE

2,348,747

MECHANICAL EXERCISING HORSE

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Application August 9, 1943, Serial No. 497,986

8 Claims. (Cl. 272-52)

This invention relates generally to the class of exercising devices and pertains particularly to novel improvements in mechanical exercising horses.

A principal object of the present invention is to provide a mechanical horse or a mechanical device by means of which exercises may be taken which will simulate the various movements performed in the riding of a horse.

Another object of the invention is to provide a mechanical horse exerciser or exercising horse, which is so constructed that desirable exercising movements can be readily given to the arms, legs and torso, such as are actually received when riding a horse either at a walk, trot, canter or run, the device being so constructed and arranged that it may be used by children or adults without danger to the user.

Still another object of the invention is to provide a mechanical exercising horse which is operated by muscular movement of the legs, arms and body generally rather than by a mechanical means so that the user of the device can increase or decrease the tempo of activity at will and is not required to respond to movements imparted to the exerciser by a motor or other mechanical means such as is employed in other types of mechanical exercising horses.

The present device is designed primarily for the use of children and another important object of the invention is to provide a device which is so designed that it will not only give desirable exercise to all muscles of the body but will require a certain degree of skill or judgment in its use and will not only enable a child to develop such skill and judgment but will also assist the child in the development of coordination of the muscles of the arms, legs and other parts of the body.

The invention will be best understood from a consideration of the following detailed description taken in association with the accompanying drawing with the understanding that the invention is not to be considered as confined to the particular showing of the drawing but may be changed or modified within the scope of the appended claims.

In the drawing:

Figure 1 is a view in top plan of the mechanical exerciser;

Figure 2 is a side elevation with parts in section; and

Figure 3 is a transverse section on the line 3-3 of Figure 2.

Referring now more particularly to the draw-

ing the numeral 1 generally designates the base or body of the present device which is in the form of a board or plank of sufficient length and width to provide a steady non-tiltable support for the exerciser.

Extending longitudinally of the top of the base 1 is a bar or rib 2 at the forward end of which there is secured the upstanding post 3 which is perpendicular to the bar 2 and which is firmly attached thereto by a bracing angle iron 4 and by a dowel pin 5 inserted from the front of the post 3 and into the end of the bar 2 as shown.

As an additional bracing means there is provided the obliquely extending tie rod 6, the upper end of which extends through and is secured in the post 3 while the lower end extends downwardly through the bar 2 and through the base-board 1.

The back face of the post 3 at the top thereof is provided with a suitable recess to receive, as at 7, an end of a vertically disposed steel leaf spring 8 which is firmly fixed to the post 3 as indicated at 9.

The numeral 10 generally designates a simulation of the head of the horse with a neck portion 11, of flat form and having a vertical rear edge face which is positioned against the forward face of the flat neck spring 8 at the top of the latter, and secured thereto by screws or other suitable securing means 12.

The width or thickness of the neck portion 11 is increased adjacent the upper end of the spring 8, by the application of the plates or blocks 13 to the opposite side of the neck 11 and extending transversely through these blocks and the neck is a handle bar 14, upon each end of which is a hand grip or knob 15. While the handle bar has been described as extending through the parts 11 and 13 it will, of course, be understood that this may be made up of two separate bar members having their ends secured in the plates 13 if desired.

Upon the base 1 at each side of the rib 2 there is secured a stirrup block 16. Upon the top of each stirrup block 16 is secured horizontally, a substantially U-shaped spring, which is formed of suitably broad flat spring metal. This spring stirrup is generally indicated by the numeral 17 and, as shown, one side or leg 18 thereof lies upon the top of a block 16 so that the loop 19 of the spring extends beyond the rear edge of the block. This looped portion of the spring is shaped to hang or bend downwardly partly across the rear edge of the block as indicated at 20, thereby giving the top leg 21 of the spring a somewhat

wider or greater range of movement than would be the case if the loop were placed directly upon the top of the block.

At the forward end of the top portion 21 of each stirrup spring 17 there is fixed a wood foot piece or tread 22, across the top of which is secured loosely to receive the toe of the rider, a leather or canvas strap 23.

In practice the stirrup blocks and stirrups will be mounted upon the base board 1, with the left stirrup slightly in advance of the right one. By this arrangement the user of the exerciser is able to maintain a better balance than would be the case if the stirrups were disposed on a line extending straight across or perpendicular to the bar 2 of the device.

In the operation or use of the exerciser the operator or rider stands with his feet each upon a stirrup block 22 with the toe engaged beneath the adjacent strap 23 and leans forward in a riding position, holding the handle bars at the sides of the neck. He then moves or swings his body up and down, flexing or bending the legs at the knees while at the same time pushing and pulling the horses "head" back and forth or toward and away from himself. This operation puts the foot or stirrup springs and the horses head or foresection of the exerciser into oscillating motion as a result of which the operator or rider automatically moves himself up and down in a manner very similar to that followed in riding a trotting or running horse.

While the use of flat metal springs or spring leaves in the foresection of the exerciser and in the stirrups, is preferred it will be apparent that compression or coil springs may effectively be employed and therefore it is to be understood that the invention is not limited to the specific type of spring shown.

In order to facilitate the moving of the exerciser from place to place, there may be attached to the front of the post 3 a handle strap 24, of leather, fabric or other suitable material. By the use of this strap the device can be slid over the floor from place to place.

It will be seen from the foregoing that there is provided in the present invention a single but strong and durable exercising device, by the use of which there may be obtained all of the sensations of riding a living horse together with the muscle exercise attendant upon such activity.

I claim:

1. An exercising device comprising a base, a pair of spring supported stirrups mounted upon said base, a vertically extending resiliently supported body upon the base and disposed in a plane passing between said stirrups, and hand grips carried by the resiliently supported body to be grasped while standing upon said stirrups.

2. A mechanical exerciser of the character stated, comprising a base, a pair of stirrups, spring means supporting each stirrup upon the base for up and down movements, an elongated spring member disposed vertically with respect to and supported upon the base in a plane passing between said stirrups, and means carried by and upon the upper end of said spring member forming hand grips.

3. A mechanical exerciser as set forth in claim 2 wherein said spring supported stirrups are arranged one in advance of the other.

4. A mechanical exercising horse, comprising a base, an upstanding post secured to said base upon the longitudinal center thereof, a head, a vertically disposed spring attached at one end to said post and having its other end connected with said head, said spring being designed to oscillate in the direction of the length of the base, means connected with the head forming hand grips, and resilient vertically movable stirrups secured to the base at opposite sides of the longitudinal center thereof.

5. An exerciser as set forth in claim 4 in which each of said stirrups comprises a substantially U-shaped leaf spring disposed parallel to the longitudinal center of the base and having its open side directed forwardly and with one leg secured to the base, a foot block secured to the free end of the other leg of each of said U-shaped springs, and a toe strap disposed across each foot block.

6. A mechanical exerciser as set forth in claim 4, in which each of said stirrups comprises a stirrup block mounted upon the base, a substantially U-shaped leaf spring disposed horizontally and having one leg secured to the top of the stirrup block, the closed or looped portion of each U-shaped spring being extended rearwardly beyond the rear edge of the underlying stirrup block and bent downwardly toward the base, and a foot block secured upon the top of the other and upper leg of each of the U-shaped springs.

7. A mechanical exerciser as set forth in claim 4, in which each of said stirrups comprises a stirrup block mounted upon the base, a substantially U-shaped leaf spring disposed horizontally and having one leg secured to the top of the stirrup block, the closed or looped portion of each U-shaped spring being extended rearwardly beyond the rear edge of the underlying block and bent downwardly toward the base, and a foot block secured upon the top of the other and upper leg of each of the U-shaped springs, said stirrups being arranged with one in advance of the other.

8. A mechanical exercising horse, comprising a base plate, a bar secured to the top of and extending longitudinally of said base plate, a post secured to one end of and extending vertically from said bar, a leaf spring secured at one end of the said post and extending vertically, a horse's head simulating unit secured to the upper end of the leaf spring at the side thereof remote from the base, means forming hand grips at opposite sides of said unit, and a pair of stirrups supported upon the base, one upon each side of said bar and each of said stirrups comprising a horizontally disposed substantially U-shaped leaf spring having its looped end directed towards the rear of the base and substantially paralleling said bar, and each of said U-shaped springs supporting a foot block upon the upper side thereof and at the end remote from the said looped end.

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