Dec. 13, 1932. J. J. SHOEMAKER 1,890,699

EXERCISING APPARATUS

Filed June 18, 1930

Fig. 1.

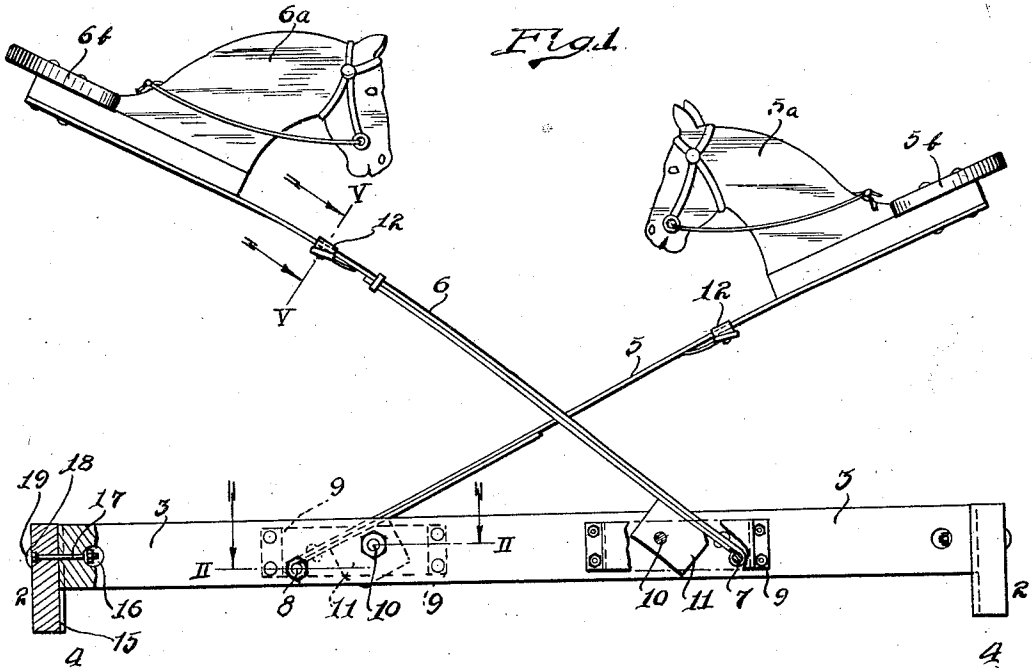


Fig. 2.

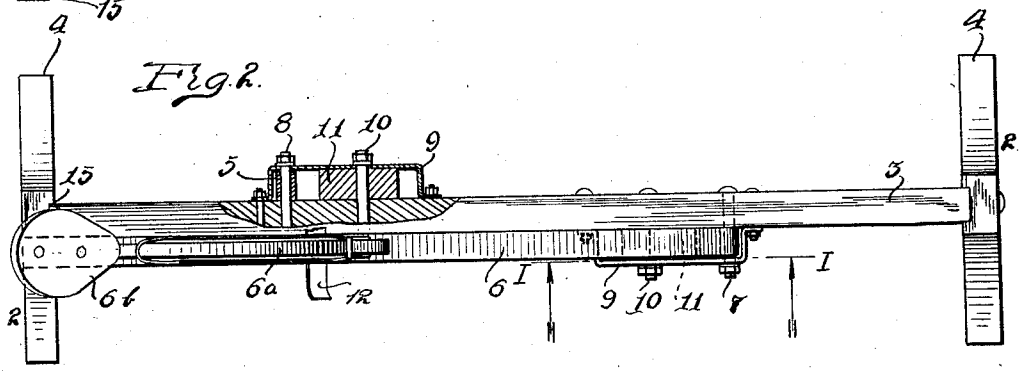


Fig. 3.

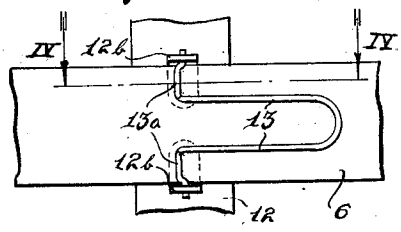


Fig. 4.

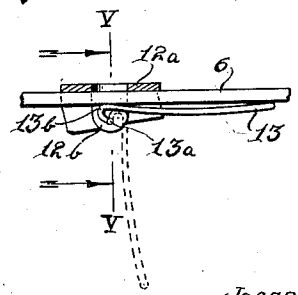
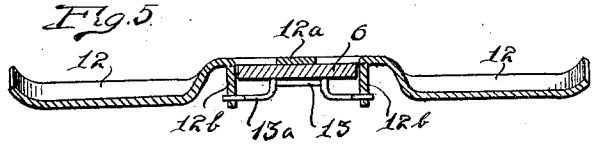


Fig. 5.



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UNITED STATES PATENT OFFICE

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EXERCISING APPARATUS

Application filed June 18, 1930. Serial No. 462,075.

My invention relates to an amusement and exercising apparatus for children, and an object of my improvements is to provide a compact, strong and readily assembled apparatus adapted to be adjusted to different requirements, and that may be cheaply constructed.

Two children may use my apparatus at the same time, sitting in positions facing each other, and thus a sociable feature is introduced in the use of the apparatus.

In the accompanying drawing:—

Figure 1 is a side view of an apparatus embodying my invention, partly broken away to show its construction, and the units of the pair of movable parts are adjusted to different heights.

Figure 2 is a plan view of the same, partly in section on the line II, II, Figure 1.

Figure 3 is an inverted plan view of a part of one of the supporting springs and a foot support showing the means of fastening these parts together.

Figure 4 is a section on the line IV, IV, Figure 3, not inverted.

Figure 5 is a section on the line V, V, Figure 4.

2, 2 is the supporting base. This may be made-up of plank 3, of the form shown in Figure 1, placed with its breadth in a vertical plane. 4, 4 are cross pieces placed at the ends of the girder 3, and extending equally on both sides of the same, and forming the pedestals of the supporting base. 15 is a vertical groove at the center of the inside face of each of the cross pieces 4, 4, this groove is of a width such that the ends of the girder 3 will fit closely therein. 16 indicates a transverse hole, adjacent to each end of the girder 3, and 17 is a hole bored in from the end of the girder into the transverse hole 16. 18 is a horizontal hole bored through the center of the end piece 4.

To secure the girder 3 to the end piece 4, the ends of the former are slid into the groove 15, until the holes 18 register with the holes 17, and then a bolt 19 is thrust through these holes, its head coming against the outer surface of the cross piece, and its screw-threaded inner end, engaging a nut in the transverse hole 16.

5 and 6 are spring bars, secured at their lower ends upon opposite sides laterally of the girder 3, and upon opposite sides longitudinally of the center of said girder, and extending slantingly in opposite directions, so as to pass each other. Each of the springs 5 and 6 is pivotally secured to the girder 3 at its lower end, by a horizontal bolt 7 or 8, extending through an eye formed at the lower end of the spring, and at its upper end is provided with a seat 5*b* or 6*b*, which seats face each other. 5*a* and 6*a* are ornamental pieces, which may represent horses heads, as shown, secured toward the outer ends of the springs 5 and 6, so as to be just in front of the seats 5*b* and 6*b*.

9, 9 are metal plates, each of which is bent into a U-shape, in cross section with outwardly extending flanges, at its ends. These plates are secured by their flanges to opposite sides of the girder 3 and extend over the lower ends of the springs bars 5 and 6, and the bolts 7 and 8 rest at their ends in the girder 3, and plates 9.

11, 11 are wooden blocks, placed between the plates 9, and the adjacent sides of the girder 3. These blocks are provided with transverse holes, at a position that is at a different distance from each of the edges of said block. 10, 10 are bolts passing through, and pivotally securing, the blocks 11, 11 in their position. These blocks serve to support the springs 5 and 6, and they may be turned to different angular positions around the bolts 10, so that different edges of the blocks 11 will engage under the springs 5 and 6, and thus said springs may be readily adjusted to different positions, and supported therein, as indicated in Figure 1.

12 is a cross piece secured to a spring 5 or 6 in position to form a foot-rest for the child occupying the seat upon said spring.

This foot-rest is made of metal and is bent upward at the center, as indicated at 12*a*, Figure 5, so as to conveniently engage over a spring 6. 12*b*, 12*b* are lugs cut out of the strip of metal 12, and bent downward so as to engage against the edges of the spring 6, and extend below the same, as shown in Figure 5. The lugs 12*b*, 12*b* have apertures

through their outer ends. 13 is a U-shaped spring having portions extending outward at right angles at the ends of its legs. These outwardly extending portions 13*a*, of the spring 13, engage in the apertures in the ends of the lugs 12*b* and the spring 13 engages under the bar 6, so as to hold the cross piece 12 in engagement with said bar. 13*b* is a shoulder formed upon the spring 13, which may resiliently engage against the bar 6, by turning the spring 13 about the portions 13*a*, engaged in the apertures in the lugs 12*b*.

The way of engaging these parts, is this:—

The cross bar 12 is first placed across the bar 6, as indicated in Figure 5. A spring 13 is then bent by having its legs pressed toward each other and the outwardly extending parts 13*a* are allowed to spring outward into the apertures in the lugs 12*b*. The spring 13 being, at this time, in a vertical downward position, the outwardly extending ends are easily engaged in the apertures in the lugs 12*b*. After this engagement is made the loop of the spring 13 is turned upward against the side of the bar 6 as shown in Figure 4. The shoulder 13*b* is carried past its center, so that it will be held by the forces developed by its resilience in its locked position, and will bind the foot-rest to the bar.

The pivoted blocks afford angularly yielding supports for the bar springs, which facilitates the action of the same.

What I claim is:—

1. In an apparatus of the kind described, the combination of a base having a vertical side, a bar spring pivotally secured at one end to said side of said base and extending in an inclined direction, a block pivoted to said side of said base so as to turn parallel to said side and having an edge engaging said spring, said block being adapted to support said spring by its edge engaging thereunder at a distance from the pivot of said spring.

2. In an apparatus of the kind described, the combination of a base having a vertical side, a bar spring secured at one end to said side of said base, so as to turn about its securing point and extending in an inclined direction, a block having edges adapted to engage under said spring at a distance from the pivot of said spring said block being rotatably secured to said side of said base so as to turn parallel thereto and adapted to support said spring at its engaging edge, said block being pivoted at a point at different distances from its edges, whereby it is adapted to be turned to have its different edges engage under said spring to support the same at different angular positions.

3. In an apparatus of the kind described the combination of a flat bar spring, a foot-rest extending transversely to said spring, lugs extending parallel to each other at right angles to said foot-rest upon opposite sides of said spring and having apertures in their outer ends and a spring bent into a U-shape with its ends turned at right angles said ends being adapted to engage in said apertures to form pivots, said spring being bent to form yielding lugs adapted to engage against and clamp the cross piece to said bar spring at a point on the other side of said pivots from the U-shaped portion when the U-shaped portion of the securing spring is turned against the surface of said bar spring.

In testimony whereof, I sign this specification.

JOSEPH J. SHOEMAKER.