

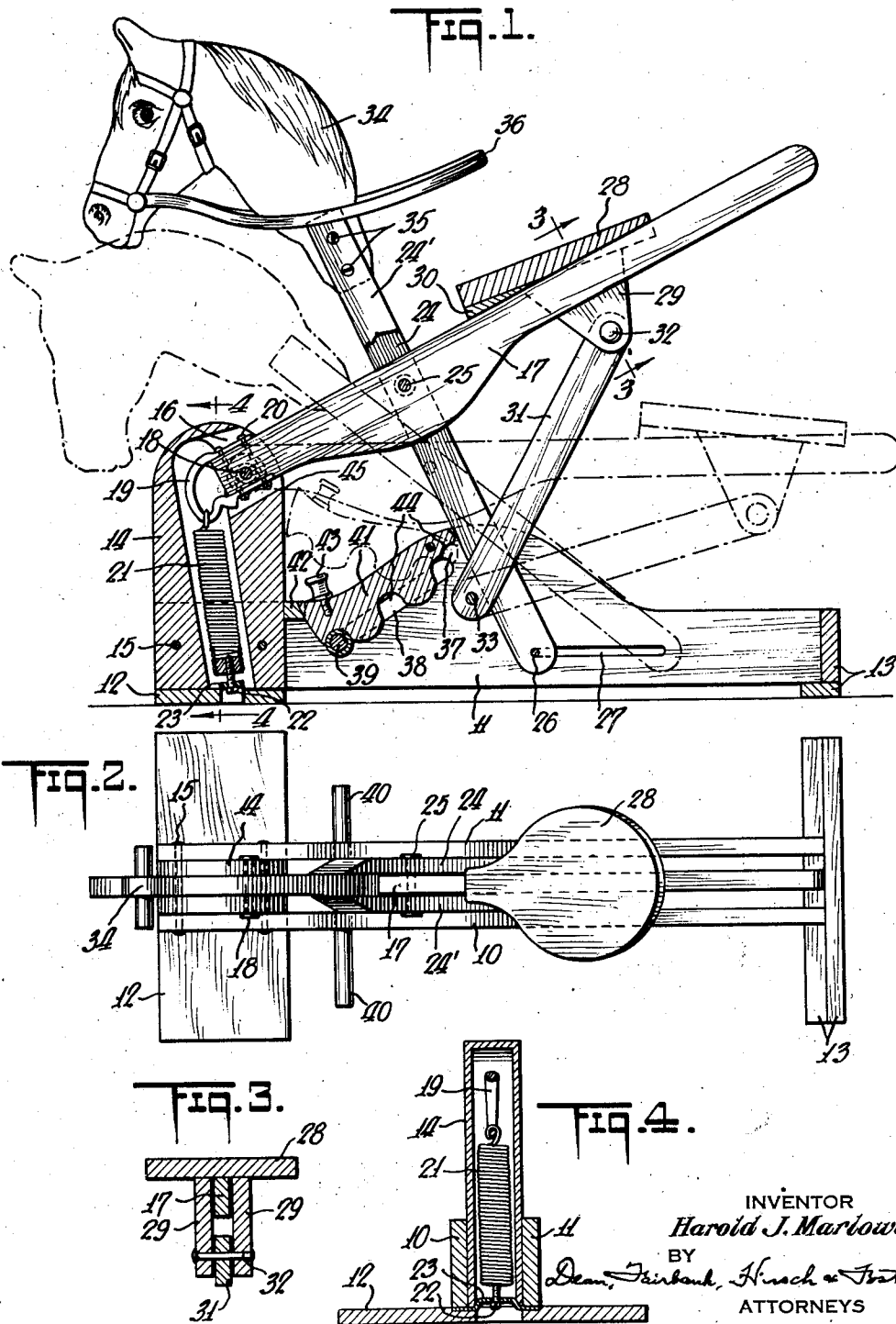
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HOBBYHORSE

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HOBBYHORSE

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While the present invention is shown in a hobby horse embodiment serving as an exercising toy, it is of wider application when built on a suitable scale, as an exercising machine for adults as well. The term "hobby horse" as used hereinafter in the specification and claims is intended to apply to each of said applications.

It is among the objects of the invention to provide a device of the above character which serves effectively to exercise muscles commonly used in horseback riding and which affords a realistic and amusing galloping effect, lacking in hobby horse devices of conventional types.

Another object is to provide a device of the foregoing type which will afford the desired complex coordinated realistic movement of head and seat simulating a galloping action, though no resort is had to elliptical or circular gearing or racks or pinions or other like machine elements, that, aside from their cost, are subject on the one hand to becoming jammed or on the other hand requiring lubrication service.

A more specific object is to impart to the seat a combined forward and backward sliding movement and upward and downward pivoting movement concurrently with an advancing and dipping movement of a horse's head, in alternations of approach and withdrawal relative to the moving seat.

Another object is to provide a construction of the above type which is suitable for use by children and which while affording the desired variety of movements and actions, rests in fixed position on the floor, without likelihood of injury to rugs or carpets.

Another object is to provide a device of the above type which, while of impressive appearance, may be inexpensively produced entirely out of wood, except for a few conventional springs and cross pins of metal.

Another object is to provide a device of the above type which lends itself readily to adjustment for convenient use by children of various sizes.

A feature of the invention is the use of a head mounting member and a seat mounting member respectively connected to the supporting base and to each other, a coil spring resisting the relative displacement and effecting the relative return of these members in the use of the device.

In a specific embodiment, the seat and head are respectively mounted on cross bars pivotally associated with each other, one of said bars having a fixed pivot with respect to the support base and the other a sliding pivot. Preferably the

head is fixedly mounted on the latter cross bar and the seat slidably mounted on the former cross bar, said seat connected by a separate link to the base.

In the accompanying drawing, in which are shown one or more of various possible embodiments of the several features of this invention,

Fig. 1 is a view in longitudinal cross section, partly in elevation, of the device,

Fig. 2 is a plan view thereof,

Fig. 3 is a detailed sectional view on the line 3—3 of Fig. 1, and

Fig. 4 is a vertical sectional view on the line 4—4 of Fig. 1.

Referring now to the drawing, the device includes a support base or frame, which in the preferred embodiment includes a pair of parallel frame boards 10 and 11, resting at their ends respectively on a transverse baseboard 12 at the front, and an angle board 13 at the rear of the device.

Between the frame boards 10, 11 and at the forward extremity thereof is a standard 14 affixed thereto by cross pins 15. The standard 14 is hollow, as shown, and affords an opening 16 near the upper end thereof, through which the forward end of a longitudinal wooden control bar 17 enters and at which it is pivoted, as at 18. The control bar also has a metal eye 19 fixed to the forward extremity thereof by cross pins 20, and a coil spring 21 within the standard is connected between the eye 19 and the base, to the latter of which it is connected by means of a screw 22 extending through a metal crossbar 23 clamped between the baseboard 12 and the frame boards 10, 11. The screw 22 at the lower end of the spring 21 is accessible from below the device, and may be tightened or loosened to adjust the tension of the spring in accordance with requirements.

The control bar 17 constitutes one of a pair of crossbars. Preferably, the coacting crossbar comprises a pair of parallel or twin bars 24, 24', straddling the control bar 17 and pivoted with respect thereof by crosspin 25 at the intermediate parts of the lengths of said bars.

The lower ends of twin bars 24, 24' extend between the frame boards 10, 11 and are connected thereto by crosspin 26 movable in slots 27 longitudinally of the frame boards.

A seat member 28 with a pair of rigid guide fins 29 straddles the control bar or slide 17 and is angularly disposed thereof by an intervening wedge piece 30. A link 31 is pivoted at 32 between the fins 29 under the seat and at 33 is piv-

oted at its lower end between the frame boards 10, 11. An animal head 34, preferably a horse's head, is fixed by screws 35 between the upper ends of the twin bars 24, 24' and is preferably equipped with reins 36 to be grasped by the user on the seat 28.

Preferably, the frame boards 10, 11 have intermediate upward protrusions 37 and are slotted at 38 for accommodating a rod 39 extending transversely of the base and protruding from opposite sides thereof at 40 to serve as a footrest. A cover 41 is hingedly mounted between the frame boards to rest at its forward end on a cleat 42 across the base, said hinged cover having a handle knob 43 and notches 44, for straddling the cross pin 39, in any of three positions to be selected in accord with the size of the user.

The operation will be apparent but will be briefly set forth herein. The child or other user, perched on the seat, rests his feet against the footrests 40, grasps the reins 36 and as the seat is moved downward under the applied weight and thrust of the user, the control bar 17 pivots downward against the resistance of the spring 21, which becomes stressed. In this downward movement, the link 31 causes the seat 28 to slide rearwardly of the control bar 17. Simultaneously, the cross link 24, 24' pivots forward about pin 25 and the head 34 dips downward, as shown in dot and dash lines, in the sliding movement of the pin 26 rearward along slots 27. Thus, concurrently with the combined downward pivoting and rearward sliding movement of the seat, the horse's head performs the combined forward and dipping movement simulating a galloping action. The downward movement is limited by shoulder 45 on the standard 14. As the user now relaxes, the stressed spring 21 returns the parts to the positions shown in full lines in Fig. 1. As the control bar moves upward, the seat is slid forward by the return of link 31 and the head 34 simultaneously rises and moves backward.

The device thus affords the desirable exercise of alternations of applied force in the downward stroke and of relaxation in the spring actuated return movement.

The effect of the advancing and dipping movement of the head as the seat is simultaneously depressed and slid rearward, and the retracting rising movement of the head as the seat thereupon simultaneously rises and slides forward, is especially intriguing. The realism of the action, simulating the galloping movement of a horse is a source of pleasure both to the child using the device and to bystanders.

The device is desirable, has no mechanism apt to jam, or get out of order, and operates without the need for attention in lubrication. Of course, if desired, the head and the seat could be interchanged and the parts otherwise reorganized to permit such application and the broader of the claims cover such reorganization.

It is understood that the device could be embellished by concealing the links with more of the outline of the animal, by applying a tail, saddles, and other accoutrements, well within the range of mechanical skill and therefore not specifically shown.

The device also lends itself for adaptation in other animal embodiments and is not limited in its use to the home or play-yard, but could to advantage be used on merry-go-rounds, or similar devices at amusement parks or picnic grounds.

It will thus be seen that there is herein de-

scribed apparatus in which the several features of this invention are embodied, and which apparatus in its action attains the various objects of the invention and is well suited to meet the requirements of practical use.

As many changes could be made in the above construction, and many apparently widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A hobby horse, comprising a support base, a sliding seat, a moving head and means interlinking said seat and said head with respect to said base to cause them to move in generally opposed direction.

2. A hobby horse, comprising a support base, a seat, a support slide therefor hinged at its forward end with respect to said base, a link connecting said seat to said base for sliding movement on the support slide in use of the device, and a head having a carrying bar pivotally connected to said support slide and slidably connected to said base.

3. A hobby horse, comprising a support base having a standard rising from the front thereof, a control bar pivoted to said standard and extending rearward therefrom, a coil spring within said standard resisting downward pivotal movement of said control bar, a seat slidable on said control bar, a link pivotally mounted under said seat at one end and pivoted to said base at the other end, whereby in the downward movement of the control bar against the resistance of the spring the seat will slide rearwardly therealong and will slide forwardly in return of the control bar under release of the stressed spring.

4. A hobby horse comprising a support base, a standard rising from the forward end of said base, a control bar pivoted near its forward end to said standard, a coil spring within said standard connected to the forward end of said control bar and urging the latter to upper position, a seat slidably mounted on said control bar, foot rests protruding from said base, and a link connected at one end to said base and at the other under said seat.

5. A hobby horse comprising a support base having a standard, a movable control bar correlated therewith, a seat slidable on said control bar, a head pivoted to said control bar and means connecting said seat and said head with respect to said base, for positive movement of said seat and said head away from each other in the depression of said control bar and toward each other in the return of said control bar.

6. A hobby horse comprising a support base, a control bar mounted thereon, a seat and a head, a spring connected between said control bar and said base to retain said control bar in an extreme position and to resist displacement thereof from said extreme position, and linkages connecting said seat and said head to said base for moving said seat and said head for alternations of relative approach and relative separation.

7. A hobby horse comprising a base, a pair of pivotally connected cross bars, one of said bars carrying an animal head, the other carrying a seat, a spring retaining said bars in one extreme position and resisting displacement

therefrom, and means connecting said seat and said head with respect to said base, each of said means having a sliding connection at one end and a pivoting connecting at the other end.

5 8. A hobby horse comprising a base, a pair of pivotally connected cross bars, one of said bars being pivoted near one end to the base, the other of said bars having a sliding connection
10 near one end to the base, a seat and a head, one associated with one of said cross bars and the other with the companion cross-bar, the element on the pivoted bar being slidable therein and the element on the other bar being fixed thereon.

15 9. A hobby horse comprising a base, a pair of bars in a vertical plane having a median pivoted connection, one of said bars having a fixed pivot near one end thereof with respect to said base, the other of said bars having a sliding
20 pivot near the lower end thereof with respect to the base, an animal head fixed on the upper end of said latter cross bar, a seat slidable on the former cross bar, a link pivotally connecting said seat to said base, and a spring resisting
25 placement of the links from one extreme setting thereof.

10. A hobby horse comprising a base, a pair of cross bars in vertical planes having a pivot connection therebetween, one of said bars having
30 a pivot fixed with respect to the base and near the forward extremity thereof, the other of said bars having a pivot end slidable along said base and carrying a head rigid therewith at the upper extremity thereof, a seat slidable along
35 said first bar, a link pivoted at its upper end to said seat and pivoted at its lower end to said base, and a coil spring connecting the forward extremity of said first bar to said base and thereby resisting downward movement thereof.

40 11. A hobby horse comprising a base having a standard fixed to the forward end thereof, a pair of cross bars extending in vertical planes and

pivotally connected midway thereof, one of said bars having a fixed pivot near the forward extremity thereof and in said standard, a coil spring within said standard connected to the forward extremity of said bar and normally retaining it in raised position, the other bar having a pivot near the lower end thereof slidable along said base and having rigidly connected to the upper end thereof an animal head, a seat straddling the spring restrained cross bar
10 and a link pivoted at one end under said seat, and pivoted at the other end to said base.

12. The combination set forth in claim 11 in which a cross pin protruding from said base serves as a foot rest.

13. In a hobby horse, a base comprising a pair of parallel frame boards, a standard affixed between said frame boards near the forward end thereof, and having a control bar extending longitudinally of said base and pivoted near its forward extremity in the upper part of said standard and extending at its rear end considerably above said standard, a metal eye secured to the forward end of said control bar within said standard and a coil spring in said standard connecting said metal eye with the base of said standard.
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14. In an article of the character described, a support frame, a movable seat and a foot rest, said foot rest comprising a rod transversely of the frame and protruding from the sides of the latter, a movable cover encircling said rod between the ends thereof, and a transverse notch formation concealed by said cover when in closed position, to retain the foot rest in selected location.
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15. In an apparatus of the character described a frame, a movable seat and a foot rest, said rest comprising a cross rod, a support therefor and a hinged cover having a plurality of notches selectively to straddle said cross rod and thereby
40 fixedly to locate it in selected position.

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