

F. GRINDY.  
ROCKING STAND.

APPLICATION FILED JULY 3, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

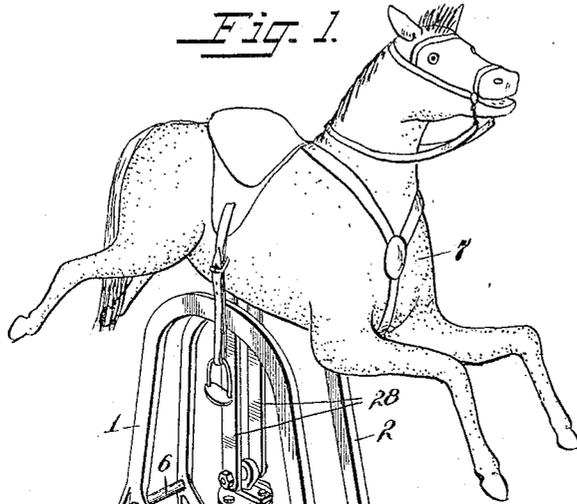


Fig. 2.

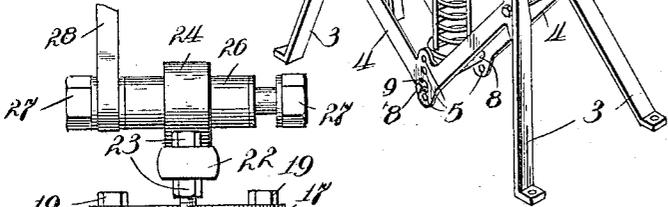


Fig. 3.

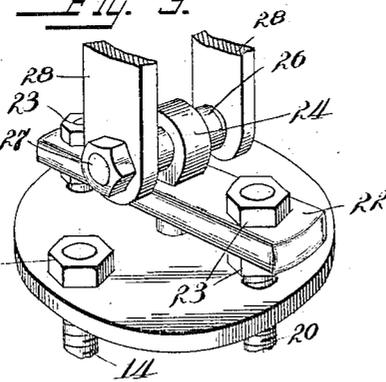
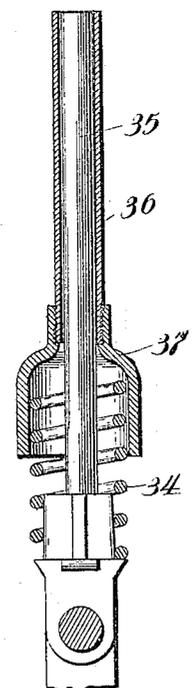


Fig. 4.



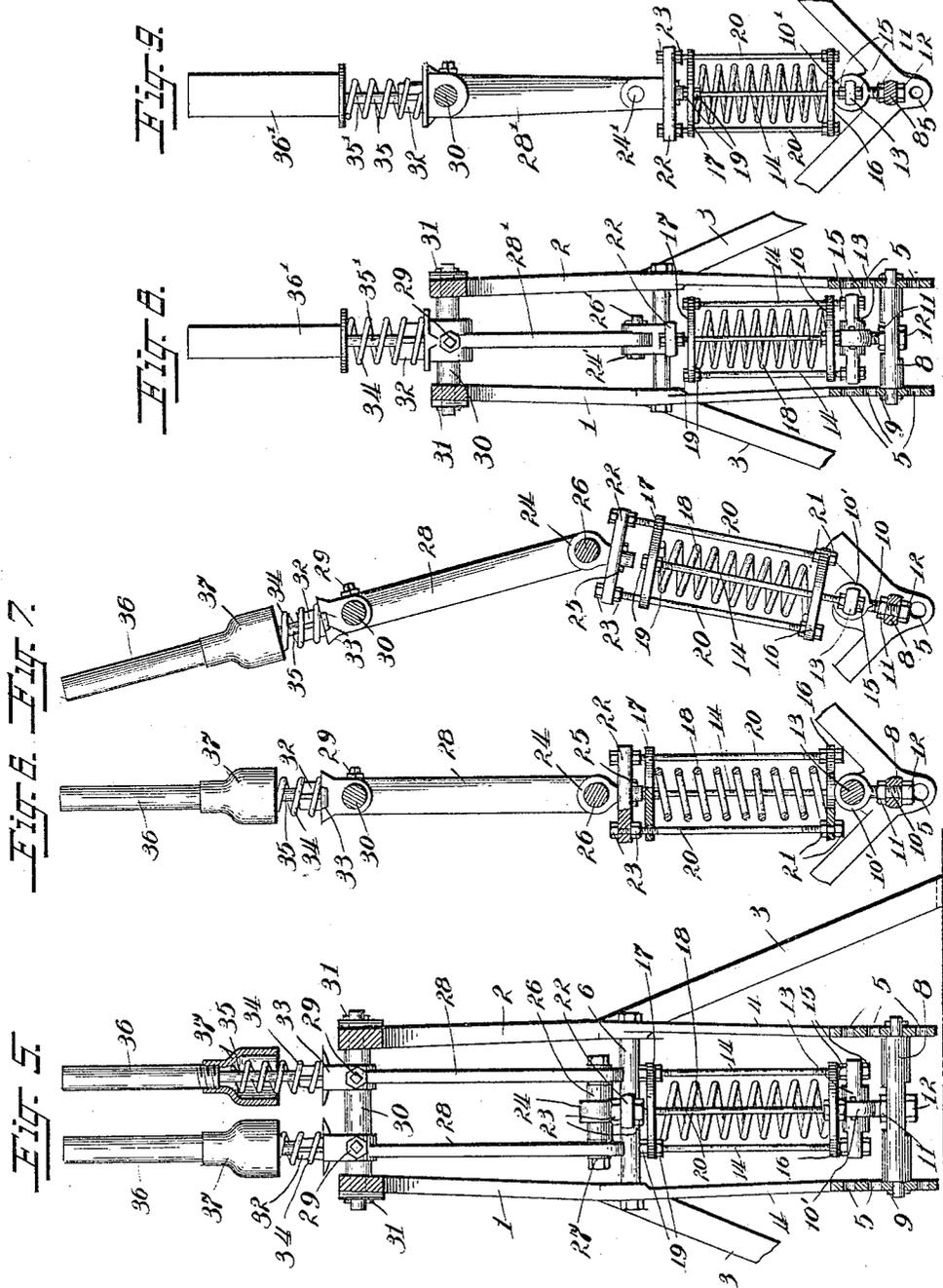
Witnesses  
*Geo. W. Humber*  
*Frank T. Lockwood*

Inventor  
*Frederick Grindy*  
by *Geo. P. Whitney*  
his Attorney.

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2 SHEETS—SHEET 2.



Witnesses

*G. P. Hamilton*  
*Genl. V. L. ...*

Inventor  
*Frederick Grindy*  
by *Go. P. Whittlesy*  
his Attorney

# UNITED STATES PATENT OFFICE.

FREDERICK GRINDY, OF FALL RIVER, MASSACHUSETTS.

## ROCKING-STAND.

No. 819,878.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed July 3, 1905. Serial No. 268,267.

*To all whom it may concern:*

Be it known that I, FREDERICK GRINDY, a citizen of the United States, residing at Fall River, in the county of Bristol and State of Massachusetts, have invented new and useful Improvements in Rocking-Stands, of which the following is a specification.

This invention relates to rocking-stands, and more particularly to those adapted to support a hobby-horse or similar device for use by children.

The objects of the present invention are the provision of an improved stand which may be adapted for the support of a hobby-horse or similar device wherein provision will be made for both a rising and falling and a rocking movement and adjustment of the amplitude of rock or swing may be had to suit the weight of the person or his desire and so that the position of the center of gravity may be regulated to cause the rider to assume a natural position.

The invention contemplates the provision of a rocking-stand of the class described which will be of simple, strong, and durable construction and comparatively inexpensive of manufacture, embodying the improvements which it is the object of this invention to provide, all as set forth fully hereinafter, and recited in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of the invention, showing an ordinary hobby-horse applied thereto; Fig. 2, an enlarged detail view showing more particularly the tension-regulator; Fig. 3, a perspective detail of the upper part of the tension-regulator; Fig. 4, a detail section illustrating the box which enters the hobby-horse; Fig. 5, a vertical section of the complete device with the hobby-horse removed; Fig. 6, a section at right angles to Fig. 5; Fig. 7, a view similar to Fig. 6, showing the manner in which the parts flex during the operation of rocking; and Figs. 8 and 9 a vertical section and side view of the invention as it is used with smaller hobby-horses for smaller children.

It will be understood that not only may a hobby-horse be used in connection with my improved rocking-stand, but any kind of a seat or representation of an animal may be substituted.

The supporting-frame is composed of two similar side pieces 1 and 2, having suitable feet 3 at their lower ends to rest upon the floor or other support and provided with de-

pending V-shaped brace-frames 4, which have at their inverted apexes vertical series of openings 5. The frames 1 and 2 are connected by suitable bolts 6. This frame is of great strength and is narrow and does not interfere with the movements of the person sitting on the hobby-horse 7.

Extending across from frame 1 to frame 2 is a cross-bar 8, whose ends form trunnions which are received in any desired openings of the series (shown at 5) and are held by linchpins 9. This provides an additional brace between the frames 4. Extending vertically through the cross-bar 8 is an eyebolt 10, whose screw-threaded portion has clamping and adjusting nuts 11 and 12 received in notches on opposite sides of said cross-bar, whereby the eyebolt can be adjusted up and down and the amount of swing of the hobby-horse, as well as the tension of the regulator-spring, may be regulated, as will appear hereinafter. Journaled in the eye 10' of eyebolt 10 is a rockable shaft 13, forming the lower part of the regulator. Extending through and rising from the flattened ends of the shaft 13 are screw-bolts 14, provided with the nuts 15 at their lower ends, whereby these bolts can be adjusted through the part 13 as desired. These bolts 14 pass loosely through a circular disk 16, between which and a similar upper disk 17 is located a coil-spring 18 of suitable strength. The bolts 14 are adjustably connected to the disk 17 by screw-threads and nuts 19. Adjustably connected to the circular disk 16 are screw-bolts 20, on whose lower screw-threaded ends are secured the nuts 21, fastening them to the disk 16. The upper portions of the bolts 20 pass loosely through the upper disk 17 and are adjustably connected by screw-threads thereon to a cross-piece 22 by the nuts 23.

It will be seen that the parts 16 and 17 constitute heads for the coil-spring 18 and the bolts 14 and 20 a cage therefor. Swiveled in the cross-piece 22 is an eyebolt 24, secured by a linchpin 25, so that it can turn in the cross-piece 22. The eye of eyebolt 24 has passing therethrough a yoke 26, secured at its ends by nuts 27 to the parallel and upright bars or carriers 28, which are secured by set-screws 29 to a rock-shaft 30, journaled in the upper portion of frames 1 and 2 and held by linchpins 31, thus bracing said frames at this point in addition to serving its function as a rock-shaft. Above the rock-shaft the carriers 28 are provided with radial ribs

32 and a seat 33 for the coil-springs 34, which rest on said seats and surround said ribs. The upper portions 35 of the carriers are cylindrical and surrounded by tubular boxings or sleeves 36, which are provided with cups 37 at their lower ends, receiving the upper ends of the springs 34. The boxings 36 are entered in openings in the bottom of the hobby-horse 7 and slide up and down on the cylindrical portions 35 of the carriers as the hobby-horse is used, and by reason of the provision of two of these carriers and boxings, as shown in Fig. 5, the hobby-horse is prevented from turning or becoming displaced when in use.

Referring to Figs. 8 and 9, there is shown therein the form the invention may conveniently assume when used for smaller sizes of hobby-horses for younger children than those who would use the rocking-stand heretofore described. The construction is in every respect the same, except that only one carrier 28' is used, which is pivoted directly on a pin 26', which is journaled in a bifurcated head 24', corresponding to eyebolt 24, which in turn is swiveled to a cross-head 22, while a boxing 36', polygonal or rectangular in cross-section, is used in place of the cylindrical tubular boxing 36, and the upper portion of the carrier 35', on which the boxing slides, is flat instead of round.

Referring more particularly to Figs. 1, 6, and 7, the operation of the invention will be clearly understood. The spring or springs 34 in connection with the boxings 36 or 36' cushion the weight of the rider on the hobby-horse 7 and provide for an up-and-down movement of the hobby-horse when in use, corresponding to the rise and fall of a horse when in motion. As the rider rocks back and forth on the hobby-horse the carriers oscillate to and fro and the heads or disks 16 and 17 are drawn toward each other, thereby compressing the regulator-spring 18 according to the previous adjustment of the parts, as will be clearly understood from the foregoing description. The rider will rock just far enough to bring the coils of the springs together, and it will be understood that the adjustment of the parts will be made as found desirable by tightening or letting out the nuts 11, 12, 15, 19, 21, and 23, while the amplitude of swing may be adjusted by posi-

tioning the rock-shaft 8 in one or the other of the openings 5.

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

1. In a rocking-stand, the combination with a supporting-frame, of a carrier pivoted thereto, a spring-tensioning mechanism pivoted to the carrier and comprising a helical spring whose coils are adapted to come together at the end of the swing of the carrier, and means for pivotally connecting said spring-tensioning mechanism with the supporting-frame at different heights in order to vary the amplitude of swing of the carrier.

2. In a rocking-stand, the combination with a supporting-frame, having an upright series of openings, of a carrier pivoted to said frame, spring-tensioning mechanism pivoted at one end to the carrier, and a cross-bar to which said mechanism is pivoted at the other end, said bar being adjustable in said series of openings in order to vary the amplitude of swing of the carrier.

3. In a rocking-stand, the combination with a supporting-frame, of a carrier pivoted thereto and having a seat, a sleeve slidable lengthwise on said carrier and having a cup, and a spring abutting between said cup and seat.

4. In a device of the class described, the combination with a supporting-frame, of a rocking carrier, a boxing slidable lengthwise on the carrier and adapted to support a hobby-horse or other similar device, and a spring interposed between the boxing and the carrier.

5. In a device of the class described, the combination with a supporting-frame, of a rocking carrier mounted thereon, a spring-tensioning device connecting the carrier to the supporting-frame, a boxing slidably mounted in relation to and supported by the carrier and adapted to support a hobby-horse or other similar device, and a spring interposed between the boxing and the carrier.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK GRINDY.

Witnesses:

ARBA N. LINCOLN,  
EDMUND DOMINGUE.