

UNITED STATES PATENT OFFICE.

WILLIAM H. LINERODE, OF BETHLEHEM TOWNSHIP, STARK COUNTY, OHIO.

EXERCISER. -----

935,854.

Specification of Letters Patent.

Patented Oct. 5, 1909.

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To all whom it may concern:

Be it known that I, WILLIAM H. LINE-RODE, a citizen of the United States, residing in Bethlehem township, in the county of 5 Stark and State of Ohio, have invented certain new and useful Improvements in Exercisers Designed More Especially for the Amusement of Children; and I do hereby declare that the following is a full, clear, 10 and exact description of the same, reference

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- being had to the accompanying drawing, making a part of this specification, and to the numerals and figures of reference marked thereon, in which-
- Figure 1 is a perspective view showing 15 the different parts properly arranged. Fig. 2 is a vertical section showing parts of the parallel standard and illustrating the vibrating bar joint or pivotal connection. Fig. 3
- 20 is a detached top view of the spring holding plate. Fig. 4 is a detached view showing the stirrup bar in an inverted position from that illustrated in Fig. 1.
- The present invention has relation to ex-25 ercisers and it consists in the novel arrangement hereinafter described and particularly pointed out in the claims.

Similar numerals of reference indicate corresponding parts in all the figures of the 30 drawing.

In the accompanying drawing, 1 represents the base bar which is designed to be placed upon the floor or other support and may be securely connected if desired, or 35 suitable cross base bars such as 2 may be

- used to prevent any lateral or tilting move-ment of the parts located above the base 1. To the base bar 1 are securely attached the vertical upright bars 3, which upright bars 40 are held in proper relationship with refer-
- ence to each other by suitable space blocks 4. About midway between the ends of the vertical bars 3 is pivotally attached the vibrating bar 5 which bar is pivotally at-45 tached near one of its ends. The vibrating
- bar 5 is provided at one of its free ends with a suitable saddle or seat 6 upon which a child or person is to sit. In the drawing I have shown what might be termed a com-
- 50 mon bicycle saddle but it will be understood in some instances it may be desirable to use a seat having a back and side arms so that a young child can be held without liability of falling. Directly in front of the 55 saddle is located the stirrup bar 7 from

which bar extends the stirrup straps 8; to

the bottom or lower ends of which are connected in any convenient and well known manner the stirrups 9. For the purpose of providing suitable attachment for the stir- 60 rup bar 7 and the stirrups 9, the vibrating bar 5 is provided with a series of apertures, 10, which apertures are for the purpose of receiving the connecting pin 11.

For the purpose of preventing any pivotal 65 or twisting movement of the stirrup bar 7, said bar is provided with the recess 12, which recess is for the purpose of receiving the upper edge or portion of the vibrating bar 5 as illustrated in Fig. 1. To the oppo- 70 site end of the vibrating bar 5 to that upon which the seat or saddle 6 is attached and upon the opposite side of the pivotal point of said bar is located the plate 13, which plate is provided with the elongated slot 14 75 and a series of open grooves 15 located at right angles to the slot 14. The vibrating bar 5 is also provided with the elongated slot 16 corresponding in length with the slot 14. 80

To the base bar 1 is attached the hook 17, to which hook is connected the short cross head 18 to which cross head are attached the bottom or lower ends of the spring heads 19, the top or upper ends of the springs 85 being connected to the upper cross head 20, to which upper cross head is connected the T bar 21. It will be understood that by mov-ing the T bar 21 to or from the pivotal point of the vibrating bar 5 the leverage 90will be increased or decreased upon the springs 19, thereby, increasing or decreasing the resiliency of the springs with reference to the vibrating bar 5.

To the top or upper ends of the parallel 95 bars 3 is pivotally attached the lever arm 22; to the free end of which lever arm is attached a handle 23, said handle being located in such a position that it can be grasped and held by a person sitting upon 100 the saddle 6.

For the purpose of providing means for causing the lever arm 22 and the vibrating bar 5 to vibrate in unison or practically so the connecting link 24 is provided, which 105 connecting link is pivotally attached at its top and bottom ends to the brackets 25, which brackets are connected to the yibrating bar 5 and the lever arm 22 respectively.

For the purpose of assisting in holding 110 the parallel vertical bars 3 in true vertical position the brace bars 26 are provided,

which brace bars also act as guides to prevent any lateral springing movement of the vibrating bar 5.

In use a child when occupying the saddle 5 or seat 6 grasps the handle 23 and by an upward and downward movement of said handle an upward and downward movement is imparted to the vibrating bar 5.

For the purpose of adjusting the bar 5 to 10 or from the base 1 the standards are provided with a series of apertures 27 in which apertures is located the pin or bolt 28, which pin or bolt is passed through the vibrating bar 5 as best illustrated in Fig. 2. For the 15 purpose of preventing rapid wear the apertures 27 are provided with the metal thimbles 29 and the aperture 30 formed in the vibrating bar 5 is provided with the metal sleeve 31. In Fig. 1 I have shown an ordi-20 nary split headed bolt which is designed to provide a means for easily detaching said bolt and again placing it in position when it is desired to change the vertical adjustment of the vibrating bar 5.

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

 In a device of the character described, the combination of a base, a standard se-30 cured to said base, a vibrating bar pivoted intermediate its ends, said bar provided with a seat at one of its ends and stirrups located near the seat, a spring interposed between the base and the vibrating bar, said spring 35 located at the opposite end from that to which the seat is attached, a lever arm pivoted to the standard, said lever arm provided with a handle at its free end and a link adapted to connect the vibrating bar and 40 lever arm together, substantially as and for the purpose specified.

2. In a device of the character described, a base, a standard secured to said base, a vibrating bar pivoted intermediate its ends and provided with a seat at its end and the 45 opposite end of said vibrating bar provided with a grooved plate, a spring, a T bar operatively connected with the spring and adapted to be adjusted to or from the pivotal point of the vibrating bar and a lever arm 50 located above the vibrating bar and connected to said vibrating bar, substantially as and for the purpose specified.

3. In a device of the character described, the combination of a base, a standard se- 55 cured to said base, a vibrating bar pivoted intermediate its ends, means for adjusting said vibrating bar to or from the base, a stirrup bar adjustably attached to the vibrating bar and a lever arm pivoted to the 60 standard and operatively connected to said vibrating bar and a spring interposed between the base and the vibrating bar, substantially as and for the purpose specified.

4. In a device of the character described, 65 the combination of a base, a standard secured to said base, said standard provided with a series of apertures, said apertures provided with thimbles, a vibrating bar pivoted intermediate its ends, said bar pro- 70 vided with a seat, stirrups carried by the vibrating bar, said stirrups located in close proximity to the seat, a spring interposed between the base and the vibrating bar and an operating arm pivoted to the standard 75 and operatively connected to the vibrating bar, substantially as and for the purpose specified.

In testimony that I claim the above, I have hereunto subscribed my name in the 80 presence of two witnesses.

WILLIAM H. LINERODE.

Witnesses: E. W. SPIDELL,

LOUIS C. PRICE.

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