No. 618.155. Patented Jan. 24, 1899.

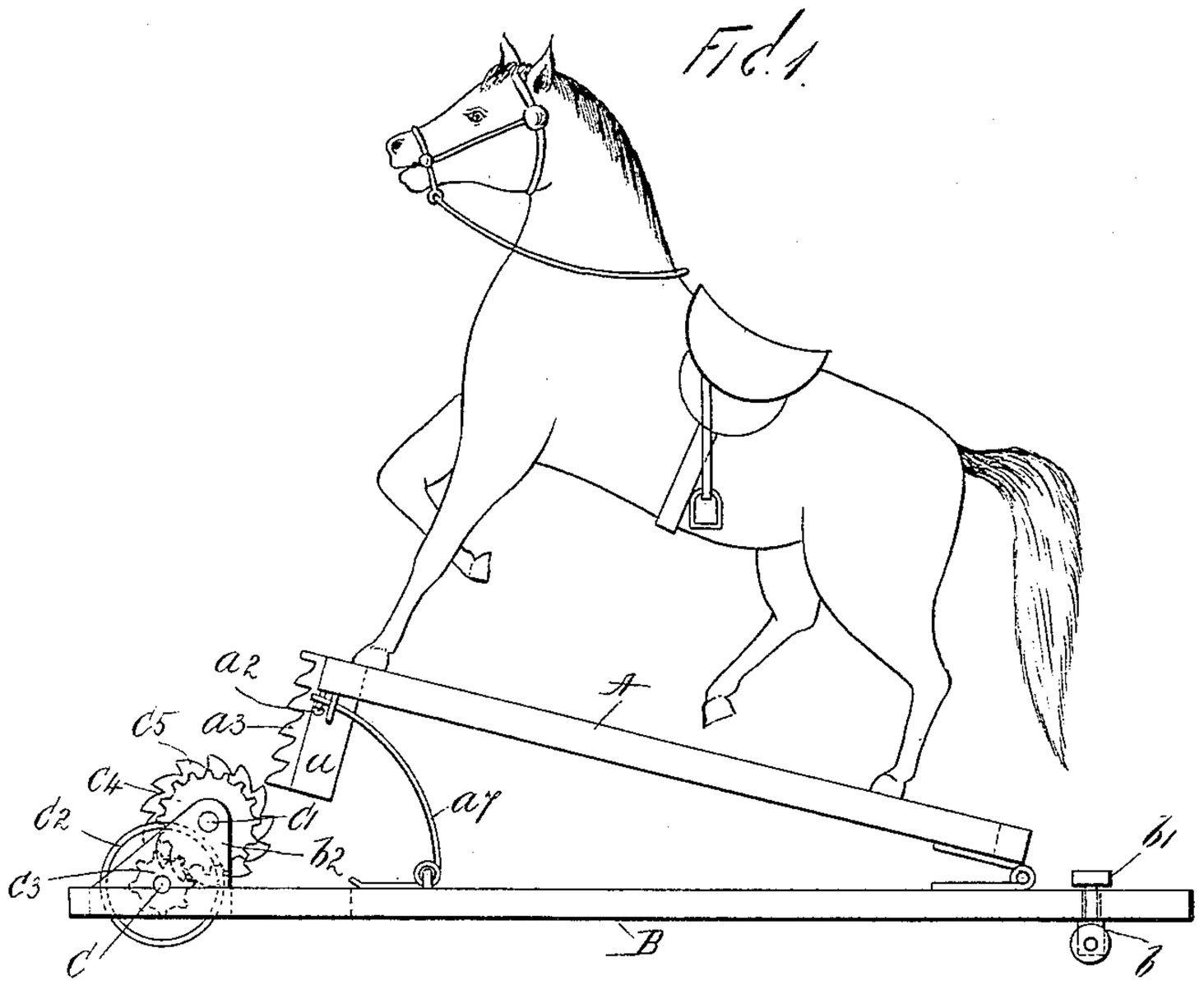
F. WILFERT.

TOY ROCKING HORSE.

(Application filed Feb. 23, 1898.)

(No Model.) 2 Sheets—Sheet 1.

FIG. 1.



WITNESS

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(No Model.) 2 Sheets—Sheet 2.

FIG. 2.

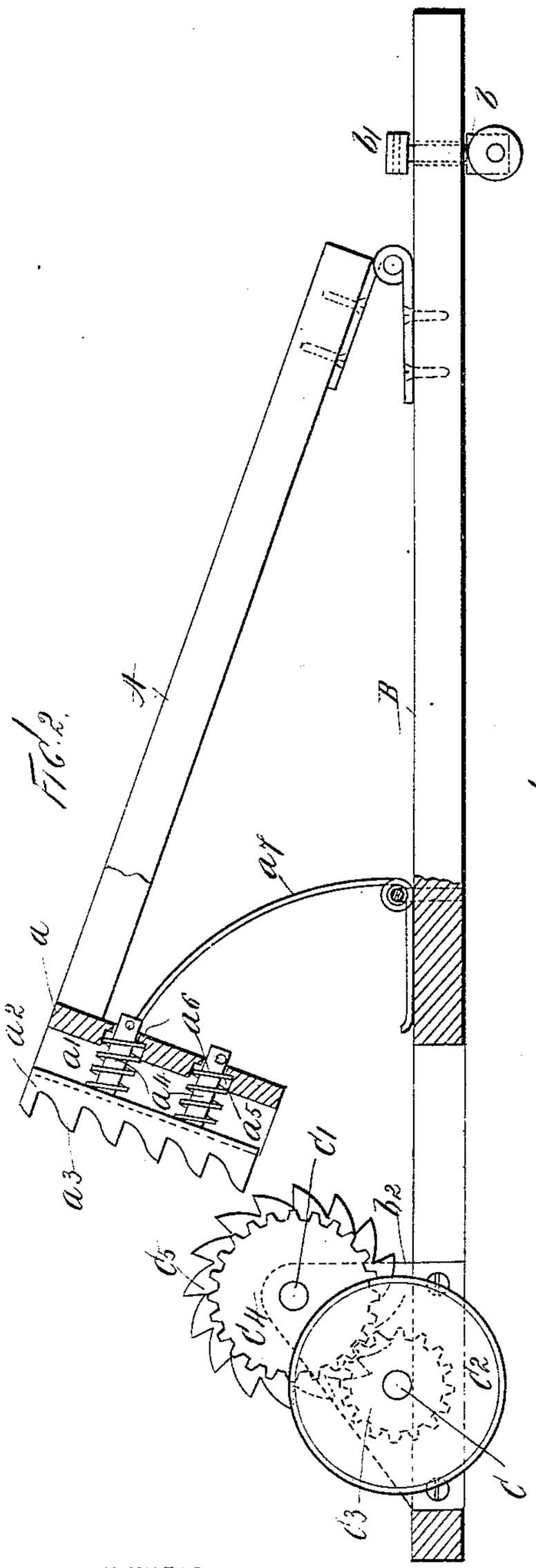
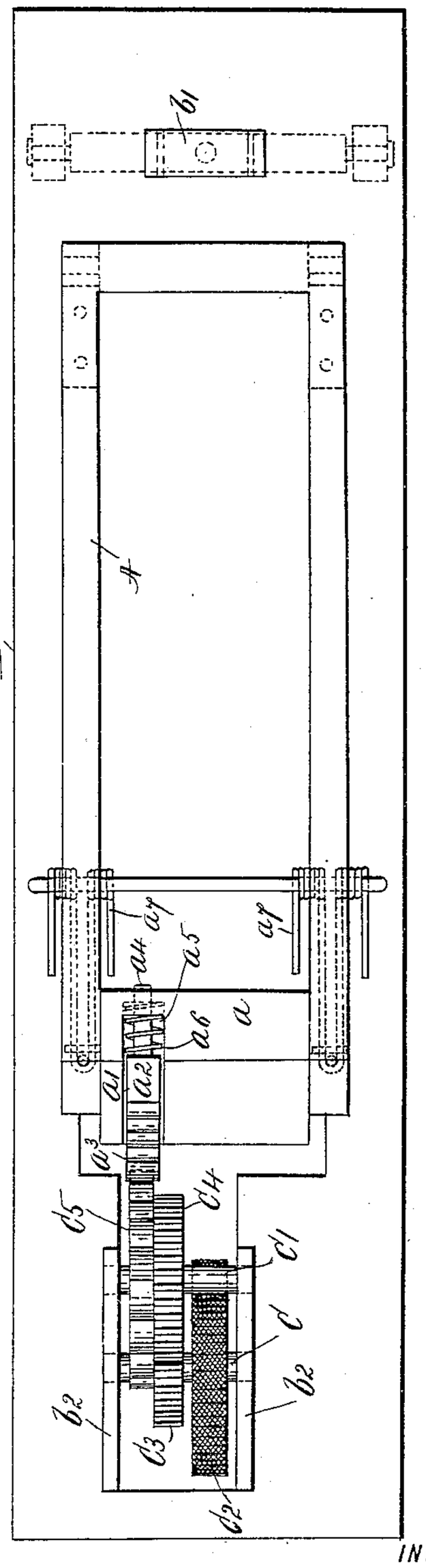


FIG. 3.



WITNESS

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UNITED STATES PATENT OFFICE.

FRANK WILFERT, OF LEOMINSTER, MASSACHUSETTS.

TOY ROCKING-HORSE.

SPECIFICATION forming part of Letters Patent No. 618,155, dated January 24, 1899.

Application filed February 23, 1898. Serial No. 671,361. (No model.)

To all whom it may concern:

Be it known that I, FRANK WILFERT, a citizen of the United States, residing at Leominster, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Toy Rocking-Horses, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to a toy rocking-horse in which the rocking motion of the horse is utilized to propel the frame upon which the horse is mounted; and the object is to provide a rocking-horse of this character which is simple in construction, economical to manufacture, and in which the rocking motion of the horse is utilized in an effective manner to propel the device.

The invention consists of a self-propelling rocking-horse constructed as hereinafter described, and defined in the claim.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by the same letters of reference in each of the views, and in which—

Figure 1 is an elevation of the improved rocking-horse constructed in accordance with this invention. Fig. 2 is a side view thereof, partly in section; and Fig. 3 is a top view.

In the drawings, A is a vertically-oscillating frame, upon which a toy horse is suitably mounted, and is constructed, preferably, of wood and is preferably rectangular in form. This frame is pivotally mounted upon a base B by means of hinge connections or in any other well-known manner. The forward end of the frame A is provided with a downwardly-extending flange a, in the front face of which is formed a vertical groove a'. A ratchet-plate a^2, having downwardly-inclined ratchet-teeth a^3, is supported within said groove by means of pins a^4, loosely sleeved through suitable openings a^5 in the flange a. Helical springs a^6 are coiled about the pins a^4 and bear at one end against the ratchet-plate a^2 and at the other end against the flange a, which serves to press the ratchet-plate forward into its operative position. Suitable means, such as transverse pins, are provided in the ends of the pins a^4 to prevent the accidental displacement of the ratchet-plate a^2.

A suitable spring is arranged upon the base B and bears upon the under side of the frame A to return the front end of the said frame to its normal position, as shown in Fig. 1, and serves to impart the oscillating or rocking motion to the frame. The base B is also preferably made of wood and is rectangular in shape. The rear end of the base B is provided with a suitable truck b, the king-pin of which extends up through said base and is provided upon its upper end with a guide-bar b', which is adapted to receive the ends of a guide or steering rope. (Not shown.)

The forward portion of the base B is provided with a suitable opening, in which are secured parallel lugs b^2, which serve as bearings for the two shafts C C', which are arranged parallel to each other and in different horizontal planes.

The shaft C is provided with a fixed wheel or roller C^2, which is suitably roughened upon its periphery and which is adapted to bear upon the floor or ground. A pinion C^3 is fixed upon the shaft C adjacent to the wheel C^2 and in mesh with a gear-wheel C^4, fixed upon the shaft C'. A ratchet-wheel C^5 is also fixed to the shaft C' and is provided with upwardly-inclined ratchet-teeth which are adapted to engage the teeth of the ratchet-plate a^2.

It is obvious that many changes in the details of construction and arrangement may be made without departing from the scope of my invention.

The weight and motion of the rider and the force of the springs impart the rocking motion to the frame A. In its downward movement the teeth of the ratchet-plate engage the teeth of the ratchet-wheel C^5 and cause the shaft C' to revolve, and with it the gear C^4, which in turn imparts a rotary motion to the pinion C^3, causing the rotation of the wheel or roller C^2 upon the floor or ground, thereby propelling the apparatus in a forward direction. The direction of travel is controlled by the steering-rope, as is obvious. The springs bearing upon the ratchet-plate provide for a slight yielding of the same and prevent any undue binding of the parts. The apparatus

is capable of rapid travel, which materially increases the pleasure derived by children from the use of such toys.

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

The combination with a base plate or board B provided with a truck *b* beneath the rear end thereof, and an opening at the front end, of vertical lugs or standards secured to the base plate or board at each side of said opening, two parallel shafts journaled in said standards, and arranged in different horizontal planes, a wheel fixed upon the lower shaft, and extending downwardly through said opening, a pinion also fixed upon said shaft, a gear-wheel fixed upon the upper shaft, and in mesh with said pinion, a ratchet-wheel also fixed on said upper shaft, and a vertically-oscillating plate or support hinged at its rear end to the base plate or board, a spring arranged between the front end of the frame or support and the base plate or board, and a spring-pressed ratchet-plate arranged in the front end of said frame or support and adapted to engage the said ratchet-wheel in its downward movement, substantially as shown and described..

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 19th day of February, 1898.

FRANK WILFERT.

Witnesses:
L. M. MULLER,
A. C. MCLOUGHLIN.