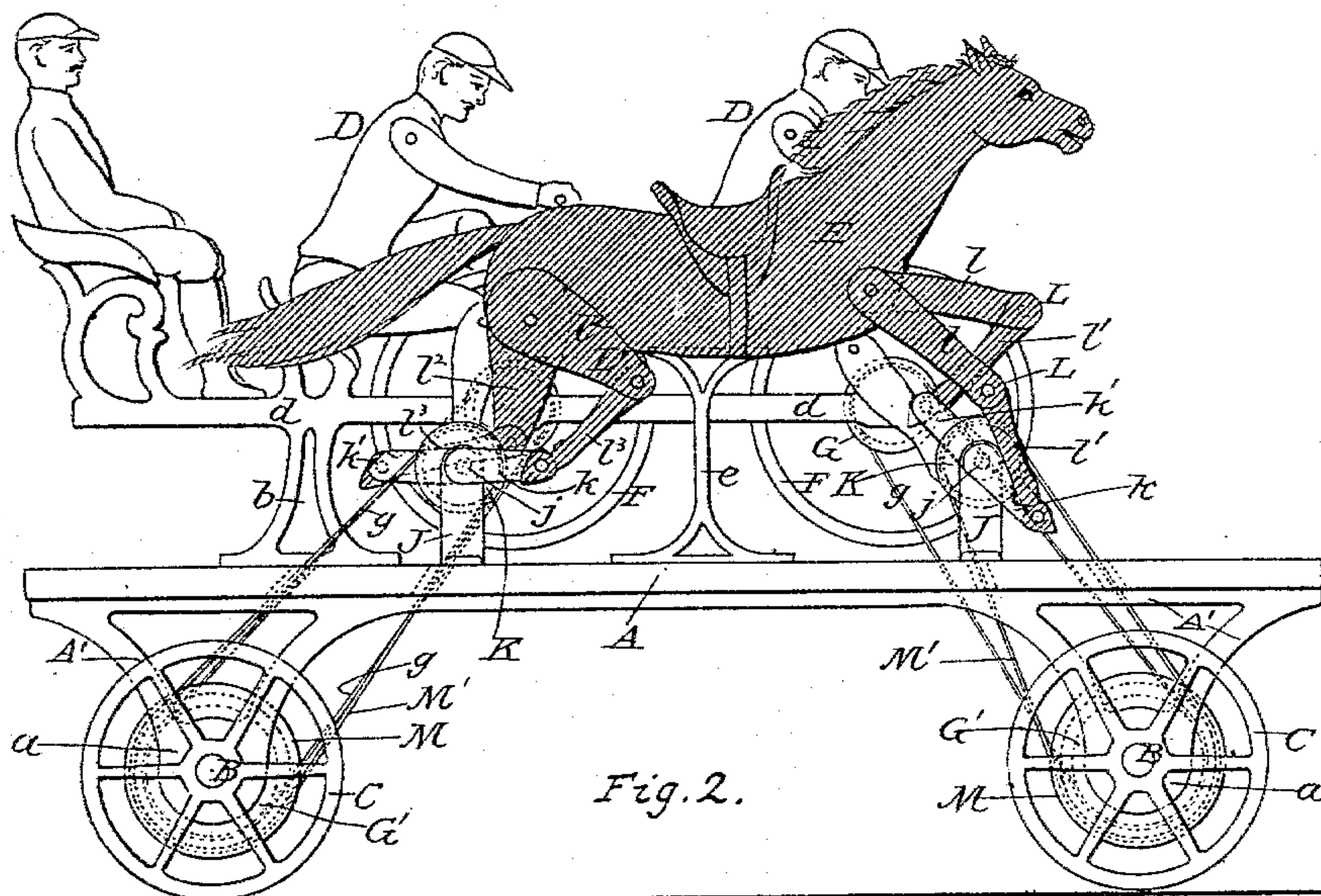
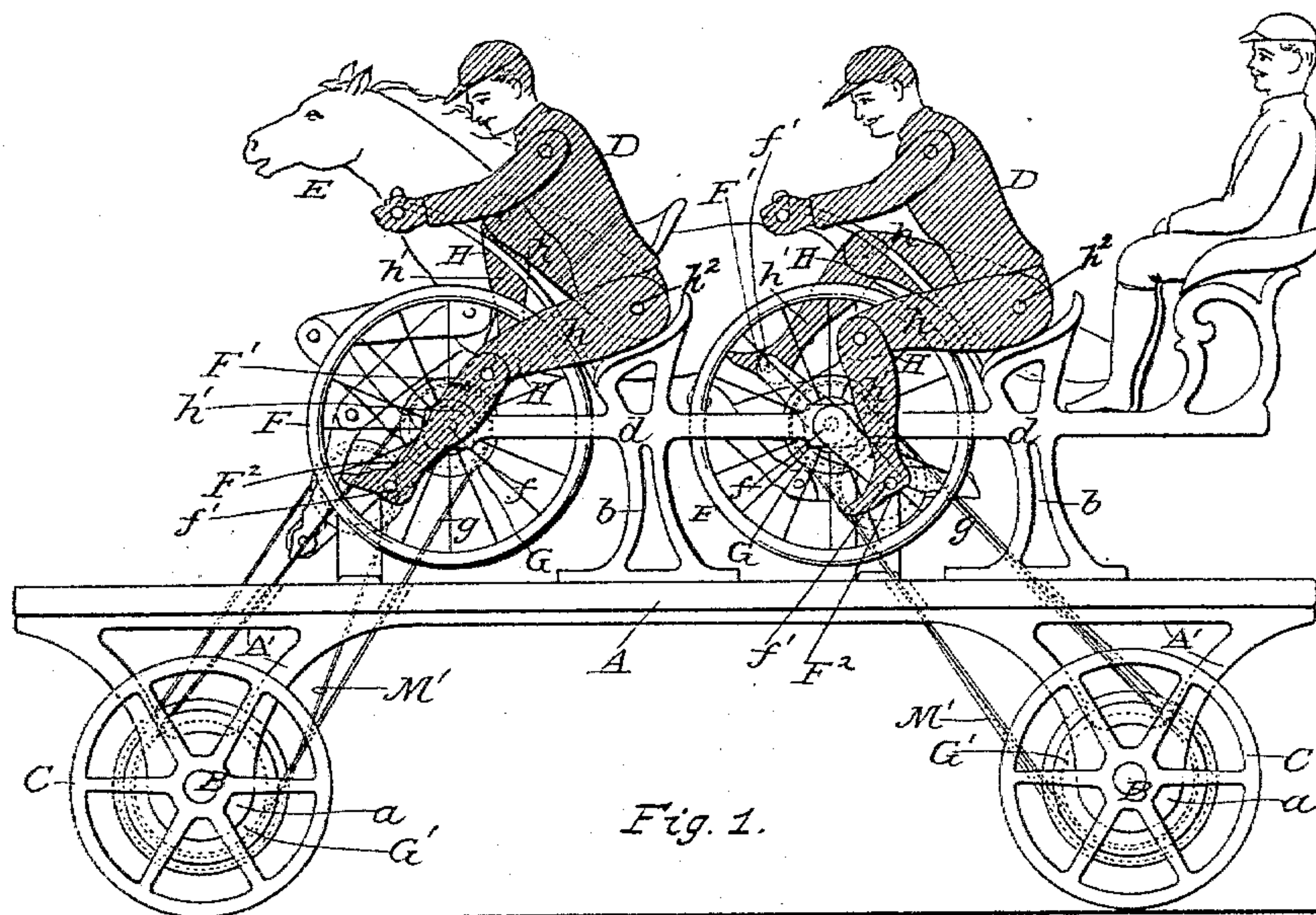


(No Model.)

C. DEMOREST.  
TOY.

No. 571,754.

Patented Nov. 24, 1896.



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# UNITED STATES PATENT OFFICE.

CHARLES DEMOREST, OF FORT ANN, NEW YORK.

## TOY.

SPECIFICATION forming part of Letters Patent No. 571,754, dated November 24, 1896.

Application filed April 14, 1896. Serial No. 587,482. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES DEMOREST, a citizen of the United States, and a resident of Fort Ann, in the county of Washington and State of New York, have invented new and useful Improvements in Toys, of which the following is a specification.

My invention relates to that class of toys which have figures supported on platforms mounted on carrying-wheels adapted to transmit, when drawn over a floor, motion to band-wheels, which actuate cranks and thereby impart motion to the legs of figures of persons and animals; and it consists of the combinations of devices and parts hereinafter described, and set forth in the claims.

The objects of my invention are to combine with a platform mounted on axles of carrying-wheels and bodies of figures of persons or animals, or both, mounted on the platform, jointed legs pivoted with the body of the figure or figures, cranks and revolving wheels supported in suitable bearings, driving band-wheels mounted on the carrying-wheels, axles, all adapted to be operated when the toy is drawn over a floor; also to combine with a platform mounted on axles provided with carrying-wheels and two or more driving band-wheels two or more figures of persons or animals, or both, arranged at a distance apart on the platform, and jointed legs pivoted to the respective figures, band-wheels and cranks actuated from the respective drive band-wheels provided with the respective axles of the carrying-wheels of the toy, and to provide particular combinations of parts and devices by which my invention may be embodied in toys. I attain these objects by the means illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a view of my improved toy from one of its sides, and Fig. 2 is a view of the same from its opposite side.

The same letters of reference refer to similar parts throughout the views.

In the drawings, A represents a horizontal platform, which may be of any preferred dimensions, yet preferably with an extension of length equal to about twice that of the width thereof, or more or less.

B B are axles mounted in bearings *a a*,

connected with brackets *A' A'*, secured to the platform A.

C C are carrying-wheels secured to the axles B B, so as to revolve with the same. 55

On the platform A are mounted one or more figures, which may be those of animals, one or more, of any selected kind, or of a human being, one or more, representing a man, woman, boy, or girl. 60

In the drawings there are shown to be mounted on the platform A (on a half side thereof) the figures D D of two bicycle-riders seated on the framework *d* of a tandem bicycle, which framework is supported by suitable standards *b b*, secured to the said platform and also to the framework of the said bicycle for holding the same stationary in relation to the platform. On the same platform (on the opposite half side thereof) there is shown the figure E of a horse supported by a suitable standard *e*, secured to both the platform and the body of the horse, so that the latter will be held stationary in relation to the former. 75

F F are bicycle-wheels, one for each figure D, which wheels are each mounted on an axle *f*, which has its bearings in the framework *d* of the bicycle.

G is a band-pulley mounted and secured to the respective axles *f*, and are revolved by bands *g g*, driven each by a driving band-wheel *G'*, mounted on the axles B B, on which the carrying-wheels C C are mounted. Secured to the outer ends of each axle *f* are cranks *F' F'*, which cranks are set in opposition to each other, preferably, and are each provided with a crank-pin *f'*. The legs H of each rider comprise the jointed parts *h h'*. (Shown by full and dotted lines in Fig. 1.) These legs are each jointed with the lower end of each figure D by pivot *h<sup>2</sup>*, pivoting part *h* in each leg thereto, while the respective foot ends of parts *h'* are each pivoted with its crank F F' by the crank-pin *f'*. 95

E is the figure of an animal, (a horse in Fig. 2,) the body of which is held stationary on the platform A and at any preferred distance from the figures of the bicycle-riders.

J J are standards secured to the platform A beneath the animal and at distances apart thereon which are adapted to be proportion-



ate to the length of the body of the animal for allowing a proper stretch of the legs of the same when being operated. Mounted in bearings provided with the upper ends of the said standards J J are axles  $j$ , on each of which is secured a driven pulley K and a pair of cranks  $k$   $k'$ , one on each outer end, which cranks are set in opposition to each other on each axle.

L L are the fore legs, each comprising similar parts  $l$   $l'$ , which are pivoted together, and having the outer ends of parts  $l$  pivoted with the body of the animal and parts  $l'$  pivoted, respectively, to the cranks  $k$   $k'$  on the axle supported by the forward standards J.

L' L' are the hind legs, comprising similar parts  $l^2$   $l^3$ , pivoted together and having the outer ends of parts  $l^2$  pivoted with the hind portion of the body of the animal and parts  $l^3$  pivoted, respectively, to the cranks  $k$   $k'$  on the axle supported by the rear standards J.

M M are driving band-wheels mounted on the axles B B and in alinement with the band wheels or pulleys K on the crank-axes  $j$ , and bands M' M' connect the pulleys K K with the band-wheels M M, that the latter may drive the former and thereby operate the cranks  $k$   $k'$  for imparting motion to the jointed legs L L' of the animal. The driving band-wheels G' and M, mounted on axles B B, may be of like diameter or they may be of different diameters. At the same time the diameters of the driven band-pulleys G and K are the same, so that the rapidity of movement of the legs of the animal and those of the bicycle-riders may vary.

When this toy is drawn over a flat surface, the carrying-wheels C, revolving the axles B, on which the platform is mounted, revolve the band-wheels G' and M and thereby impart motion simultaneously to the cranks F' F<sup>2</sup> and  $k$   $k'$  through the band-pulleys G' and K, their driving-bands, and the axles  $f$  and  $j$ , and cause the respective cranks to actuate the jointed legs of the respective figures and the wheel or wheels of the bicycle-riders.

When preferred, a single bicycle-rider and a single wheel of a bicycle may be substituted for the tandem bicycle and its two riders, and the figure of the animal may be, instead of that of a horse, a goat, ox, buffalo, donkey, or other animal, as may be selected.

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

1. In a toy, the combination with platform A axles B B, brackets A' A' provided with bearings  $a$   $a$ , carrying-wheels C C secured to said axles and a driving band-wheel G', of a stationary bicycle-frame  $d$  mounted on a standard secured to the said platform, crank-

axle  $f$ , mounted in bearings provided with said standard, bicycle-wheel F, band-pulley G, and cranks F' F<sup>2</sup> mounted on said crank-axle, a figure of a bicycle-rider mounted on the stationary framework of the bicycle, jointed legs H jointed with the said cranks and the lower end of the figure and a driving-band  $g$ , connecting the driven band-pulley with the driving band-wheel G', substantially as and for the purposes set forth.

2. In a toy, the combination with a platform A, axles B B, brackets A' A', provided with bearings  $a$   $a$ , carrying-wheels C C and driving band-wheels M M secured to said axles, of the body of a figure (of an animal) mounted on a standard secured to said platform, standards J J also secured to the platform, crank-axes  $j$   $j$  mounted in bearings in the said standards, band-pulleys K K and cranks  $k$   $k'$  mounted each on said axles  $j$ , jointed legs L L pivoted with a forward portion of the said body and the cranks of the forward crank-axle  $j$ , jointed legs L' L' pivoted with a rearward portion of the said body and with the rearward cranks and driving-bands connecting the band-pulleys K K with the driving band-wheels M M, substantially as and for the purposes set forth.

3. In a toy the combination with platform A axles B B, brackets A' A' provided with bearings of said axles, carrying-wheels C C and driving band-wheels G G' and M M mounted on said axles so as to revolve with the same, of a stationary bicycle-frame having stationary bodies of figures fixed thereto and supported by standards from the said platform, a stationary body of a figure (an animal) supported from the platform and at a side and distant from the bicycle-frame, crank-axes  $f$   $f$  having bearings in the bicycle-frame, band-pulleys G G bicycle-wheels F and cranks F' F<sup>2</sup> secured to the respective crank-axes  $f$   $f$ , crank-axes  $j$   $j$  mounted in bearings on standards secured to the platform in alinement with the body of the animal figure, band-pulleys K K and cranks  $k$   $k'$  mounted on said crank-axes  $j$   $j$ , jointed legs pivoted with the lower ends of the bodies on the bicycle-frame and with the said cranks F' F<sup>2</sup>, jointed legs L L, L' L' pivoted with the opposite end portion of the body of the animal figure and with the respective cranks on the axles  $j$   $j$ , and driving-bands  $g$   $g$  and M' M', substantially as and for the purposes set forth.

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Witnesses:

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