

M. U. LOREE.

TOY VEHICLE.

(Application filed Sept. 22, 1900.)

(No Model.)

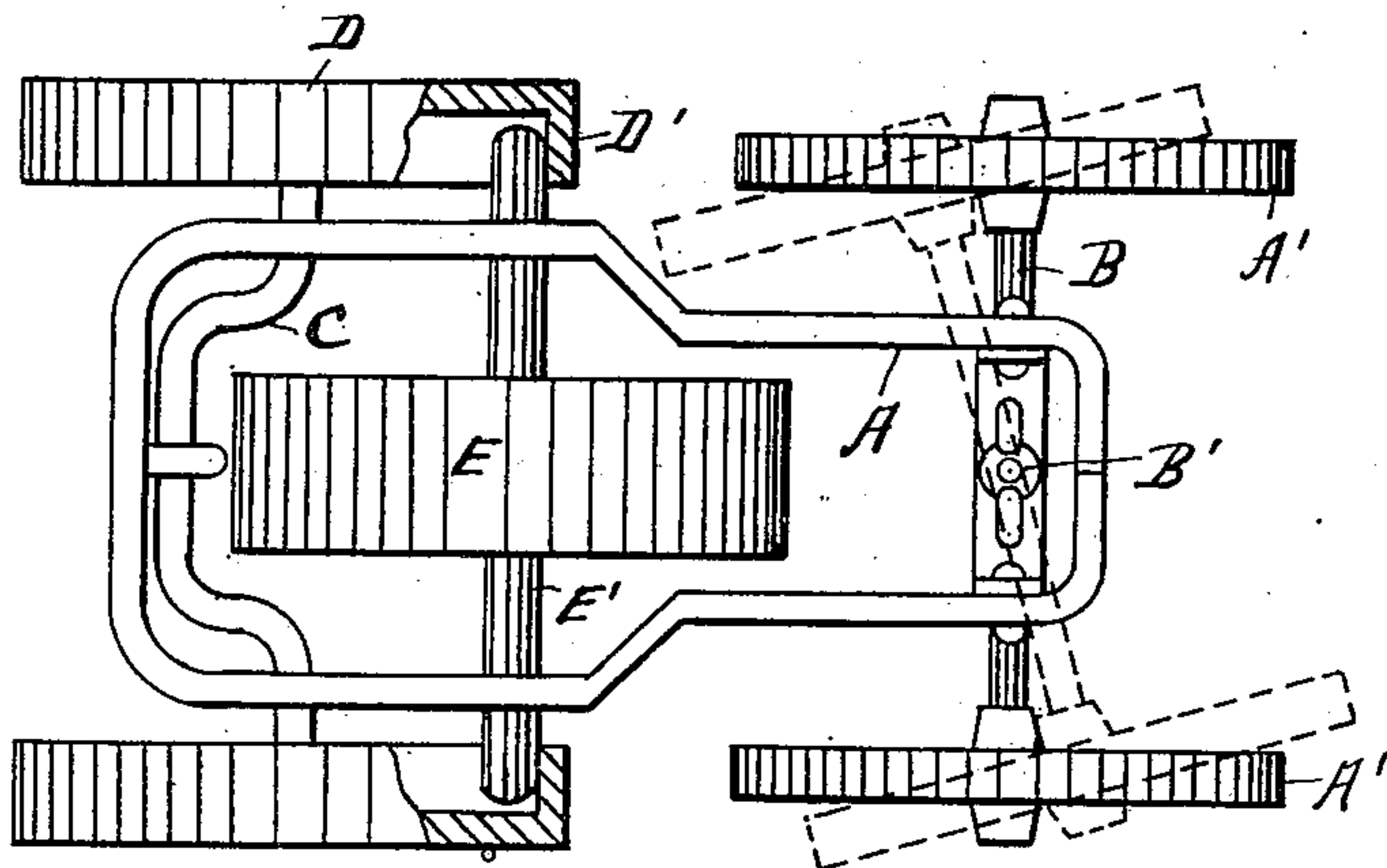


Fig. 1.

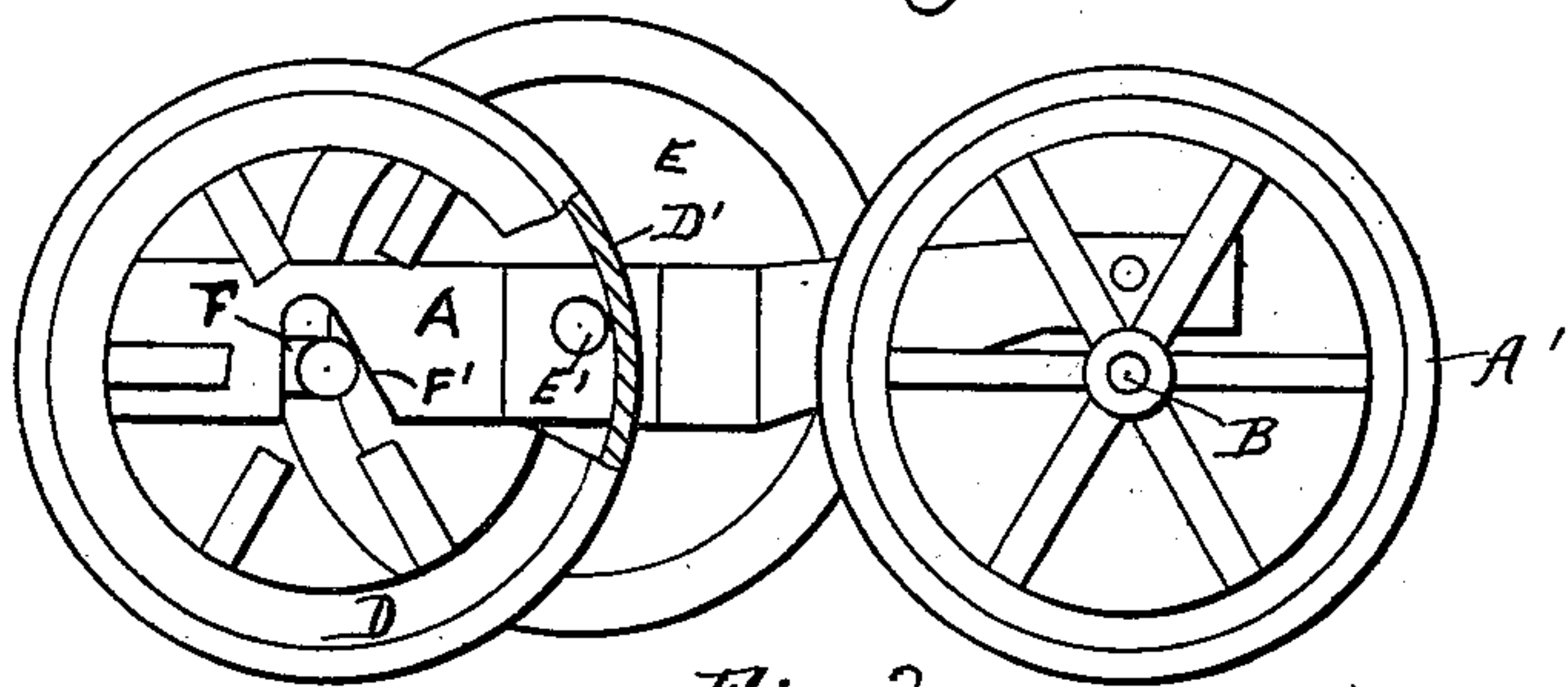


Fig. 2.

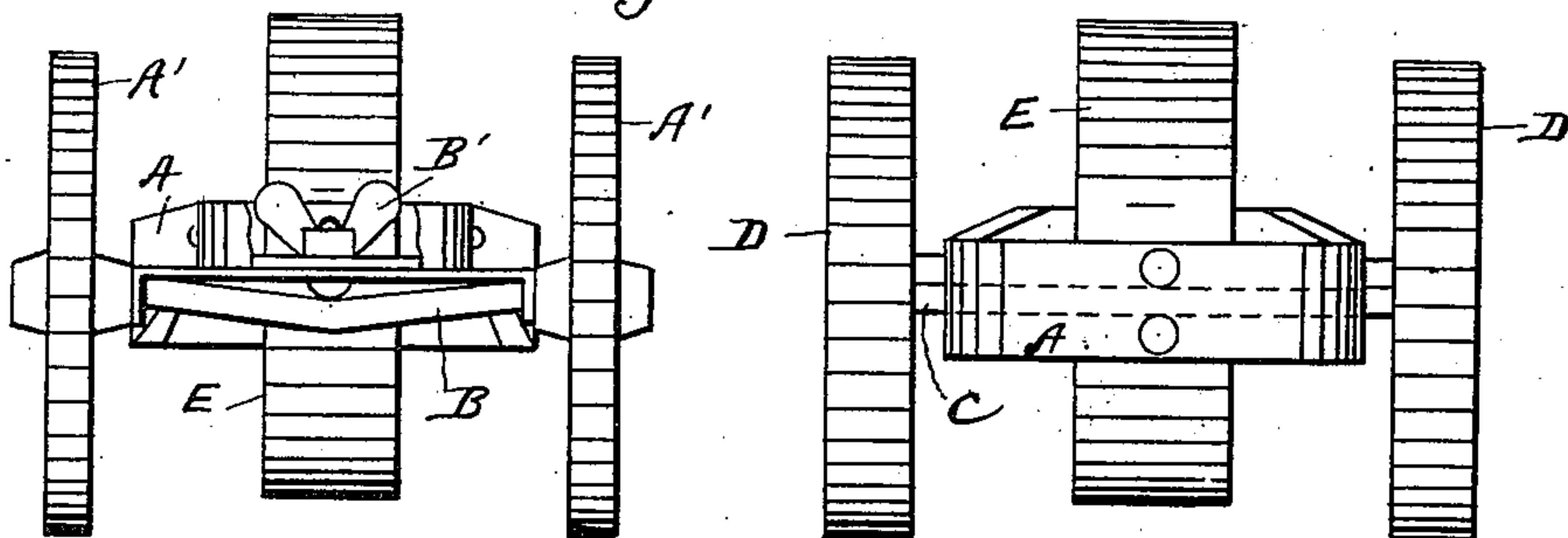


Fig. 3.

Fig. 4.

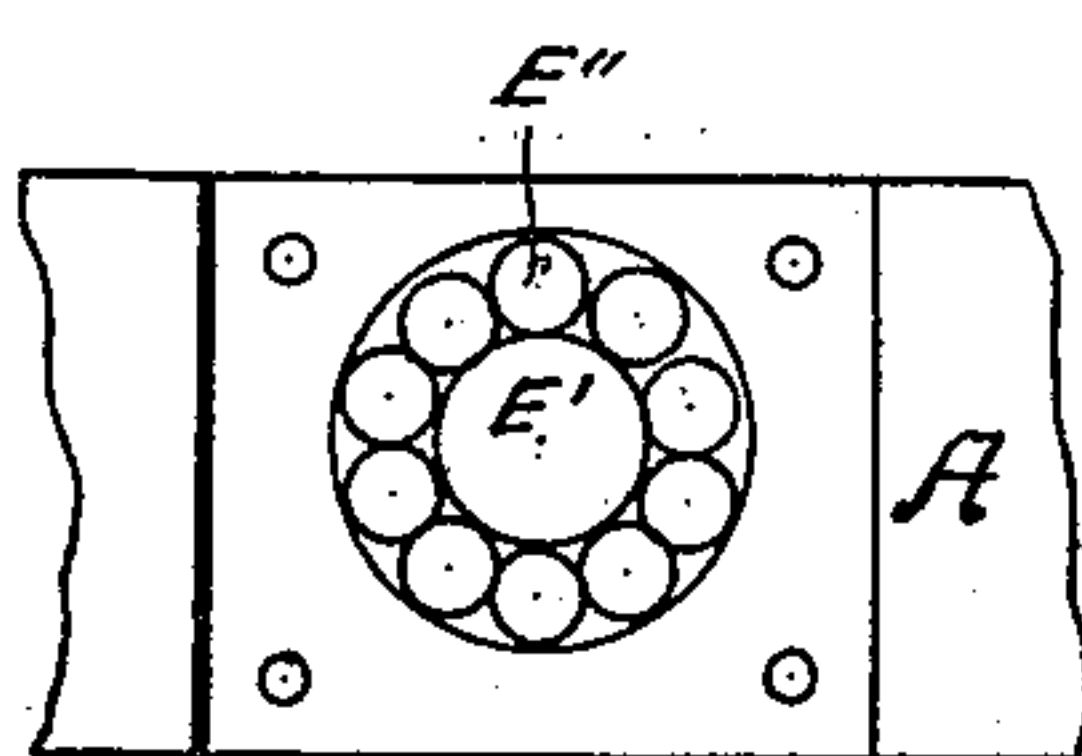


Fig. 5.

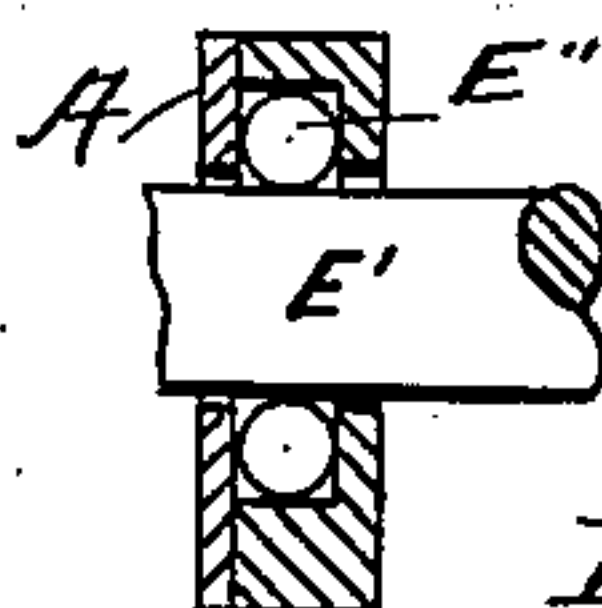


Fig. 6.

Witnesses
J. M. Lubin
Carl Noe.

Inventor
M. U. Loree
By R. J. McGowan
his Attorney.

UNITED STATES PATENT OFFICE.

MANFRED U. LOREE, OF MONTGOMERY COUNTY, OHIO.

TOY VEHICLE.

SPECIFICATION forming part of Letters Patent No. 663,506, dated December 11, 1900.

Application filed September 22, 1900. Serial No. 30,741. (No model.)

To all whom it may concern:

Be it known that I, MANFRED U. LOREE, a citizen of the United States, residing in the county of Montgomery, in the State of Ohio, have invented certain new and useful Improvements in Toy Vehicles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in toys; and it consists of a locomotive or toy vehicle having the structural features hereinafter described and claimed.

The object of the invention is to provide a toy of the above type which is driven by friction from a momentum or fly wheel and in which the accumulation of dust between the axle of the momentum-wheel and the peripheries of the running wheels, which interferes with a proper engagement between the axle of the momentum-wheel and the peripheries of the running wheels, is prevented.

I am aware that heretofore toys of this class have been constructed in which the power is transmitted to the outer peripheries of the running wheels; but more or less trouble has been experienced with this manner of transmitting the power to the running wheels owing to the outer peripheries of the running wheels wearing smooth, which is due to their contact with the floor or other surfaces over which the vehicle is run. This wearing smooth of the rim or outer peripheries of the running wheels causes the shaft of the momentum-wheel to slip more or less on the peripheries of the running wheels, and thereby fail to frictionally engage said peripheries at all times. It is therefore the object of the present invention to avoid this difficulty, which is done by transmitting the power from the shaft of the momentum-wheel to the inner peripheries of the running wheels, where the contact is protected from dust or other accumulations which interfere with a proper engagement between the parts—namely, the axle of the momentum-wheel and the running wheels—as will be hereinafter

ter more fully described in the following specification.

In the drawings, Figure 1 is a plan view of my improved locomotive toy. Parts of the rear running wheels are broken away to show the engagement of the shaft of the momentum-wheel with the flanges of the running wheels. Fig. 2 is a side elevation with a portion of one of the rear running wheels broken away to show the position of the shaft of the momentum-wheel. Figs. 3 and 4 are front and rear elevations of the locomotive toy. Figs. 5 and 6 are enlarged detail views showing the ball-bearings of the shaft of the momentum-wheel.

In the specification similar letters of reference indicate corresponding parts.

A designates the frame of the vehicle, which may be varied according to requirements. B is the front axle, which is mounted in the front end of said frame. This axle is so mounted that it may be placed upon various angles by means of a thumb-screw B', which binds the said axle and holds it in desirable position, the guide-wheels A' being loose on said axle. The said thumb-screw serves the function of the well-known fifth-wheel in vehicles, so that the toy may be so adjusted that it may be made to run in a circle or in a straight line.

C is the rear axle upon which the rear running wheels D D are loosely mounted. These wheels D D are provided with flanges D' D'.

E designates a momentum or fly wheel which is mounted on axle E', which is journaled in the frame A. The ends of said axle project into the running wheels D D and are brought in frictional contact with the inner sides of the flanges D' D'. The axle E' is provided with ball-bearings E'', as shown in Figs. 5 and 6, the said ball-bearings being located in the sides of the frame A. The frame A, it will be observed from Fig. 2, has upwardly-extended slots F in opposite sides, into which the axle C of the rear wheels projects. The slots F have tapering sides F', which are nearer the axle E' of the momentum-wheel.

In starting the toy the frame A is pressed downwardly upon by the hand, and the toy is rolled back and forth over the floor the desired number of times to give the fly-wheel a

sufficient velocity or momentum, which is transmitted to the wheels D D. In this downward pressure of the frame the tapering sides F' of the slots F press the axle C outwardly 5 or away from the axle E' of the momentum-wheel. This causes the axle of the momentum-wheel to grip the inner peripheries D' D' of the running wheels D D firmly, and a maximum amount of power is thus transmitted 10 to said running wheels. It will be seen that there is a special part of the wheels D D in which the axle of the momentum-wheel engages, this part being the inner surface of the flanges D' D', which are not subjected to 15 any other wear.

Having described my invention, I claim—
In a toy vehicle, the combination with a

frame having upwardly-projected slots therein, the inner sides of said slots being on a backward taper, running wheels the axle of 20 which projects into said slots, the said running wheels having flanges, a momentum-wheel mounted in said frame, the axle of said momentum-wheel projecting into the running wheels in contact with the inner sides 25 of the flanges of said running wheels substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

MANFRED U. LOREE.

Witnesses:

R. J. MCCARTY,
C. THEOBALD.