

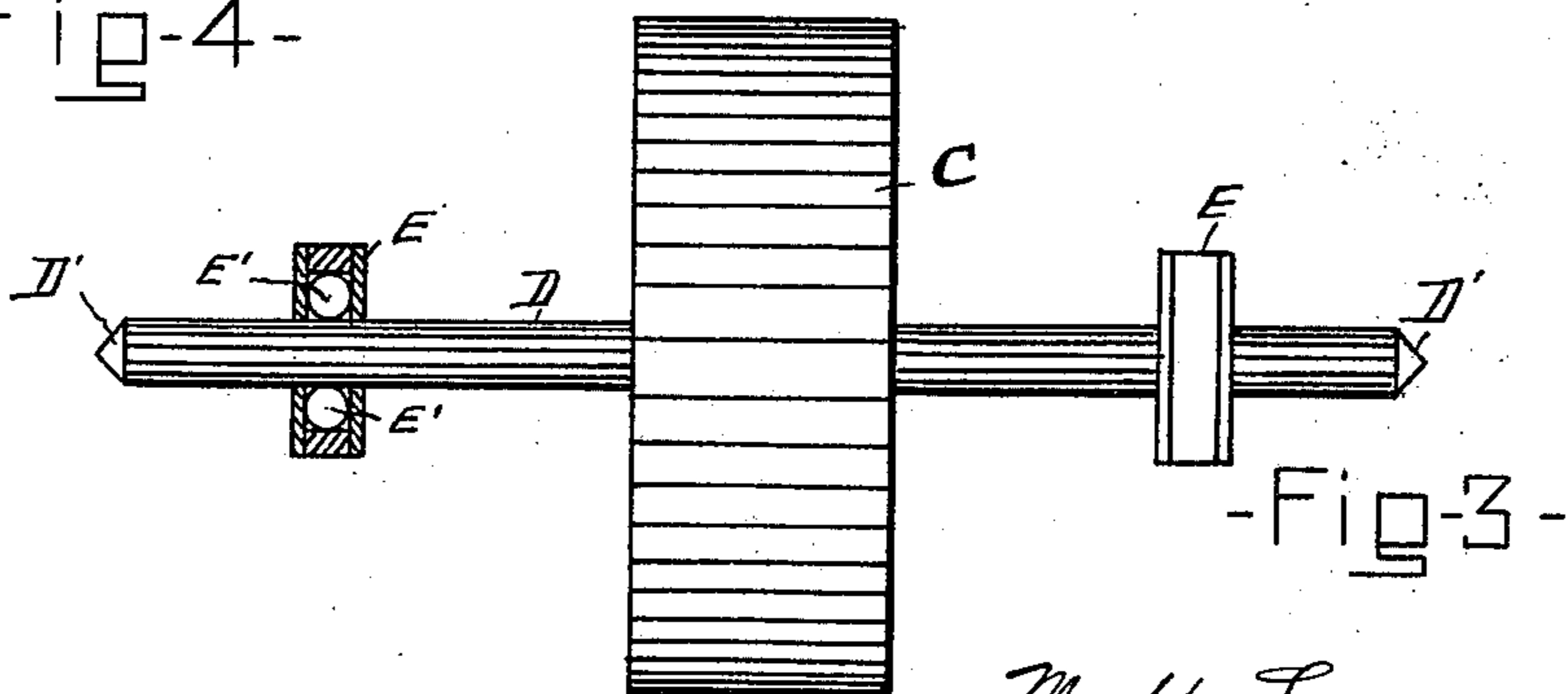
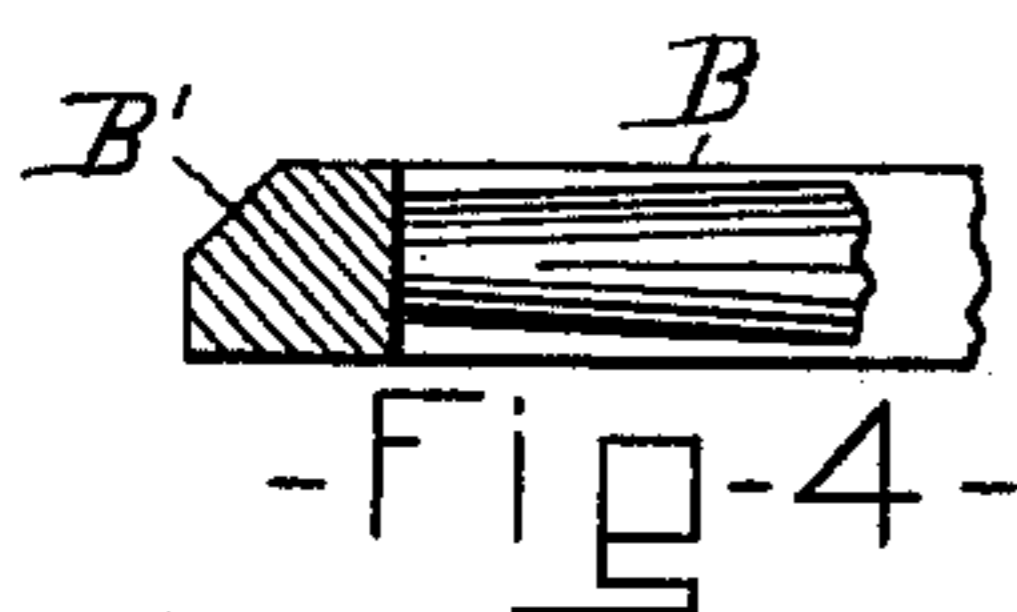
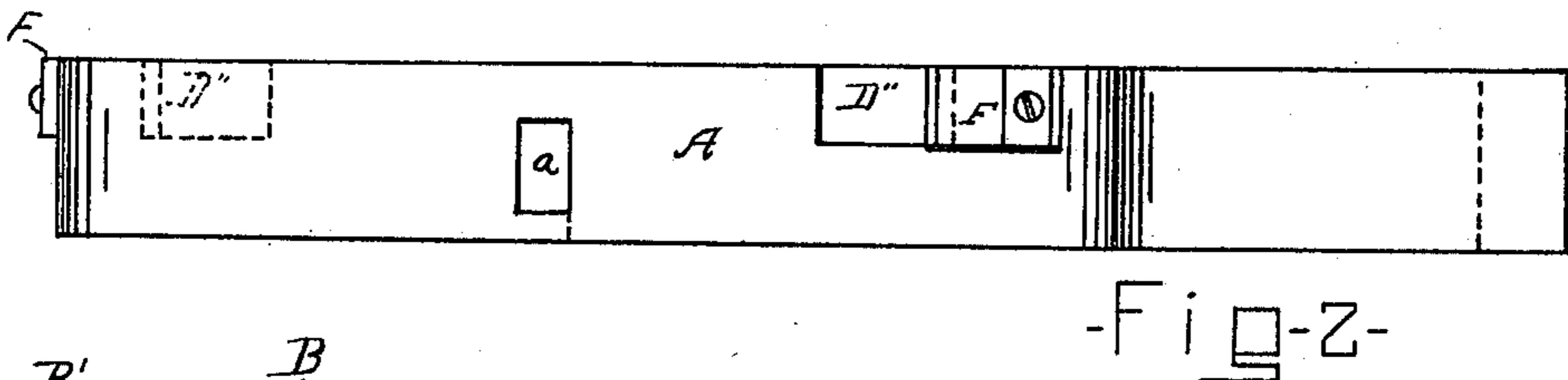
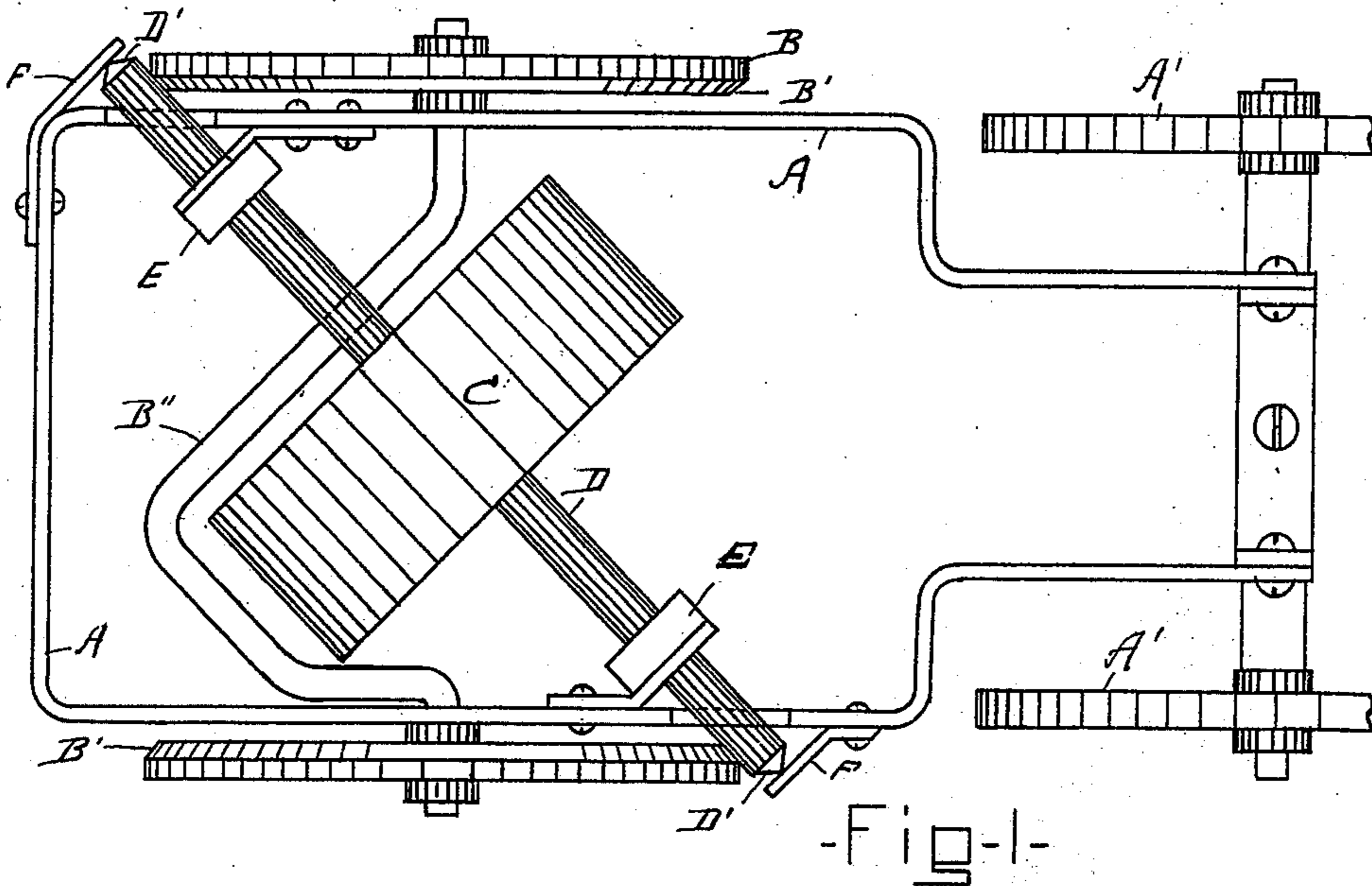
No. 684,993.

Patented Oct. 22, 1901.

M. U. LOREE,
LOCOMOTIVE TOY.

(Application filed Apr. 15, 1901.)

(No Model.)



WITNESSES
Matthew Liebler.
C.M. Thibault.

M. U. Loree
INVENTOR
By R. J. M. Carty
ATTORNEY

UNITED STATES PATENT OFFICE.

MANFRED U. LOREE, OF MIAMISBURG, OHIO, ASSIGNOR OF ONE-HALF TO
MOSE COHEN, OF DAYTON, OHIO.

LOCOMOTIVE TOY.

SPECIFICATION forming part of Letters Patent No. 684,993, dated October 22, 1901.

Application filed April 15, 1901. Serial No. 55,876. (No model.)

To all whom it may concern:

Be it known that I, MANFRED U. LOREE, a citizen of the United States, residing at Miamisburg, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Locomotive Toys; 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 locomotive toys or that class of toys which are propelled through the energy stored in a fly-wheel or momentum-wheel.

The object of the invention is to provide a toy of the above type in which a maximum degree of energy is transmitted from the shaft of the momentum-wheel to opposite sides of two of the vehicle-wheels, it having been ascertained that the transmission of power in this manner to the vehicle-wheels increases to a great extent the running capacity of the vehicle.

Preceding a detail description of the invention, reference is made to the accompanying drawings, of which—

Figure 1 is a plan view of a truck in accordance with my invention. Fig. 2 is a side elevation of the truck-frame. Fig. 3 is a detached elevation of the momentum-wheel, the shaft, and bearings thereof. Fig. 4 is a sectional view through the rim of one of the rear or transmission wheels.

A designates a suitable rectangular truck-frame, having steering-wheels A' and rear transmission-wheels B. The inner surfaces of the rims of the transmission-wheels B are beveled or tapered, as at B', in order to make suitable contact with the shaft D of the momentum-wheel. The axle B'' of said wheels has a suitable curvature to clear the momentum-wheel. The said axle is journaled in openings a in the sides of the truck-frame A. The shaft D of the momentum-wheel, it will be observed from Fig. 1, is mounted on an angle to the sides of the truck-frame in order

to transmit power to opposite sides of the transmission-wheels B. By thus mounting the momentum-wheel C and shaft D the stored energy due to the initial rotation of the momentum-wheel will be transmitted to opposite sides of the rims of the transmission-wheels B, and it has been ascertained that the transmission of power in this manner to the transmission-wheels B is very great.

E designates boxes which contain ball-bearings E' for the shaft D, the said boxes being suitably mounted on the truck-frame. The ends of the shaft D are tapered, as at D', and are confined between two plates or keepers F, which are secured to the truck-frame. The shaft D is inclosed in openings D'' in the sides of the truck-frame.

Having described my invention, I claim—

1. In a toy of the above type, the combination with a truck-frame, a momentum-wheel, the shaft of said momentum-wheel being mounted on an angle to the sides of the truck-frame, and geared to opposite sides of the transmission-wheels, substantially as specified.

2. In a locomotive toy, the combination with a truck-frame, transmission-wheels mounted therein, the axle of said transmission-wheels being of angular form, a momentum-wheel occupying the space within said axle, the shaft of said momentum-wheel being mounted on an angle to the sides of the truck-frame and geared to opposite sides of the rims of the transmission-wheels, substantially as specified.

3. In a locomotive toy, the combination with a truck-frame, of transmission-wheels mounted therein, the inner sides of the rims of said transmission-wheels being beveled, a momentum-wheel, the shaft of said momentum-wheel being mounted on an angle to said transmission-wheels, and portions of said shaft being in contact with the beveled portions of the rims of the transmission-wheels, and means for preventing any longitudinal movement of the shaft of the momentum-wheel.

4. In a locomotive toy, the combination with a truck-frame, of transmission-wheels mounted therein, the inner portions of the

rims of said transmission-wheels being beveled, a momentum-wheel, the shaft of said momentum-wheel being mounted on an angle to the transmission-wheels, and engaging with
5 the beveled surfaces on opposite sides of said wheels, antifriction-bearings on the inner sides of the truck-frame in which the shaft of the momentum-wheel is mounted, and

means for preventing any longitudinal movement of the shaft of the momentum-wheel. 10

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

MANFRED U. LOREE.

Witnesses:

R. J. McCARTY,

THOMAS B. HERRMAN.