

(No Model.)

2 Sheets—Sheet 1.

M. BLACKBURN.
TRUCK.

No. 601,231.

Patented Mar. 29, 1898.

Fig. 1

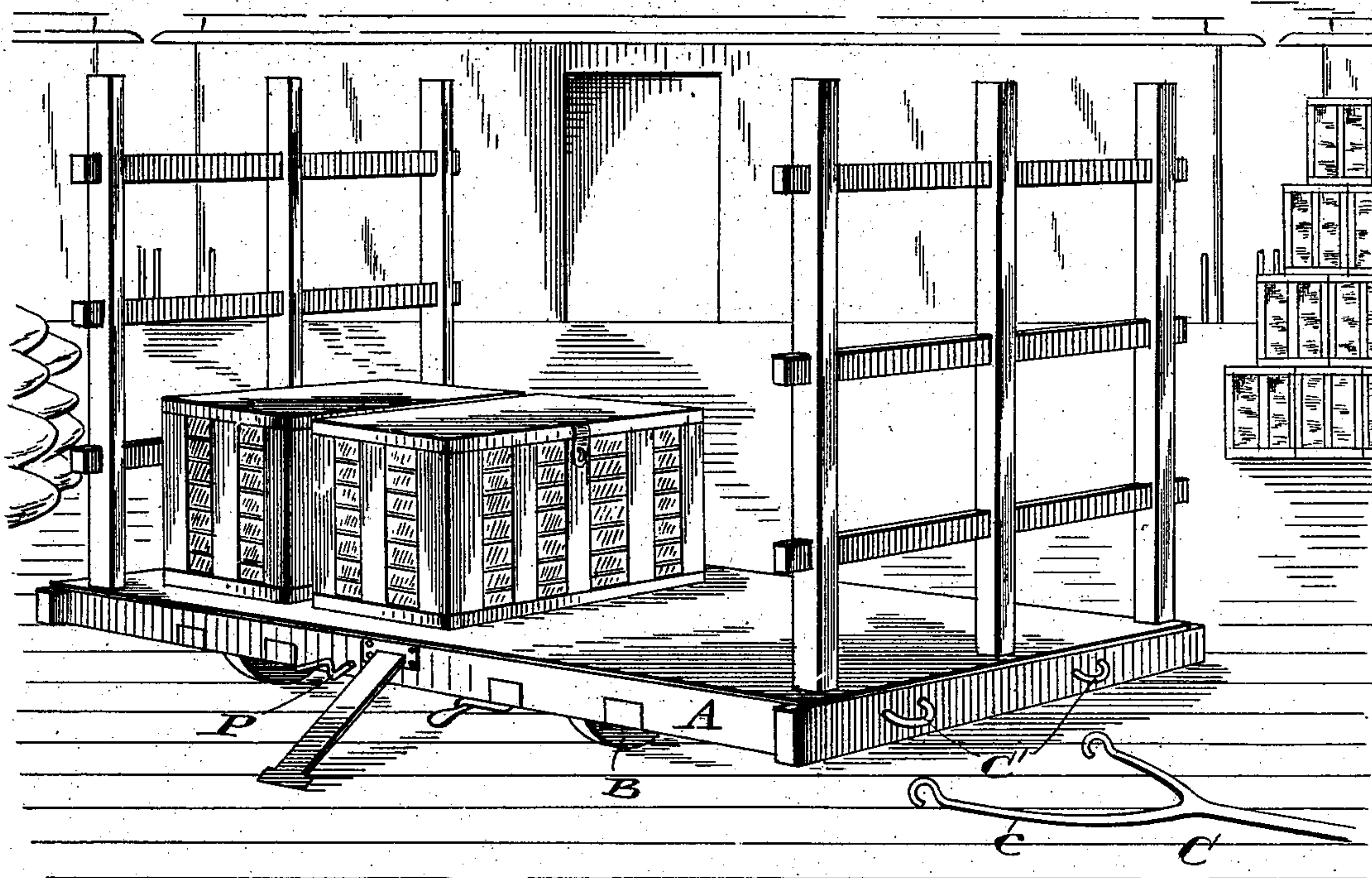
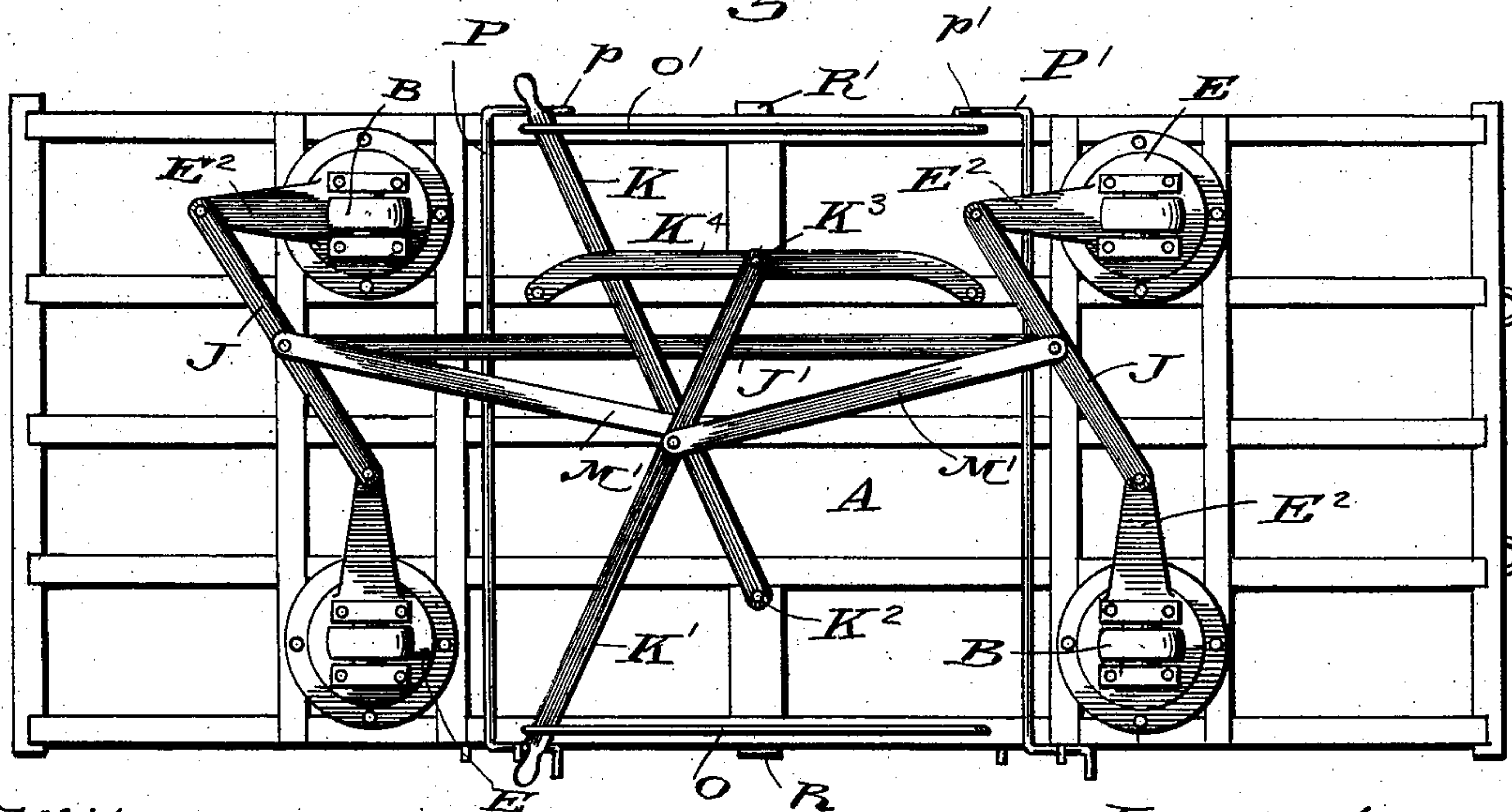


Fig. 2



Witnesses:—

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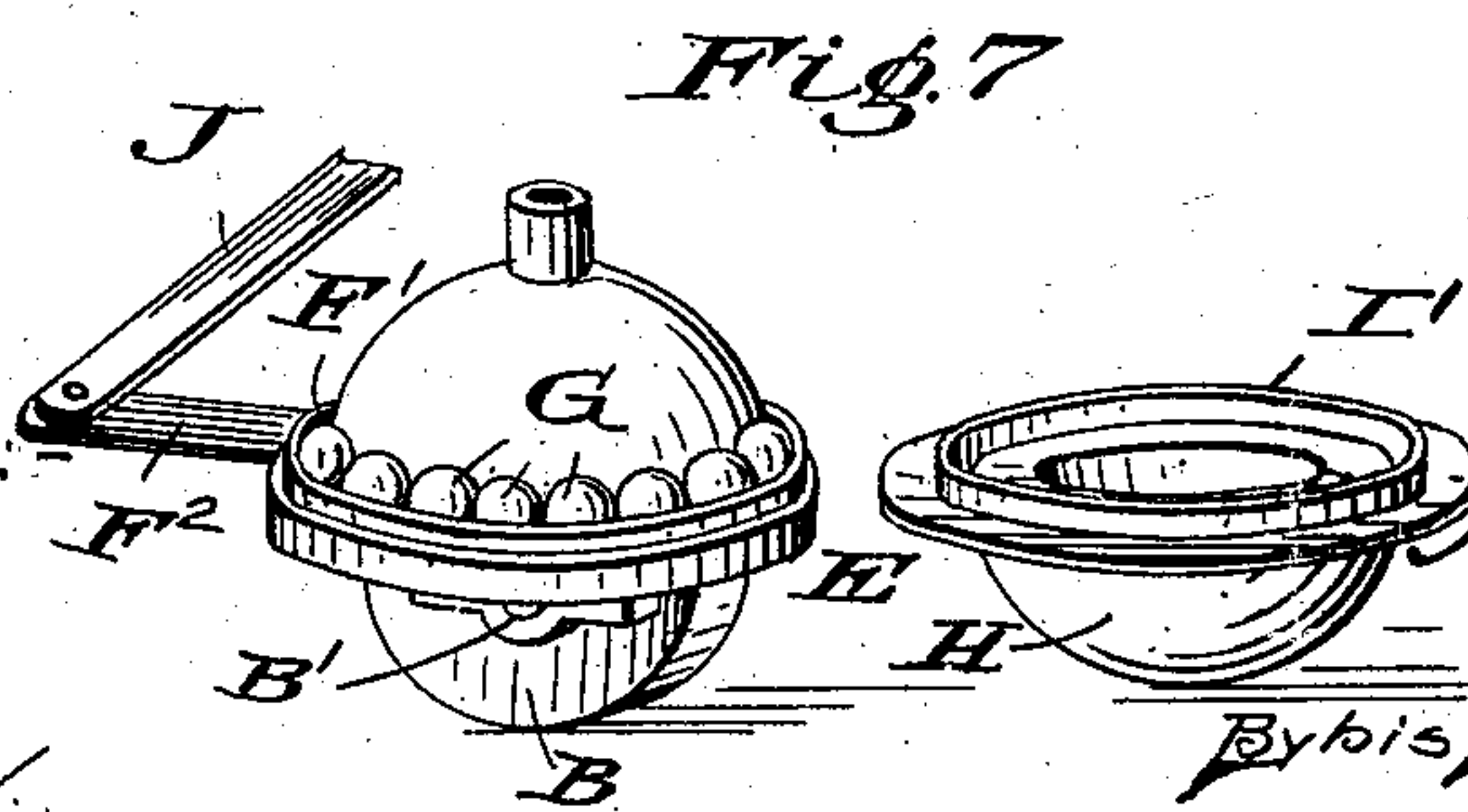
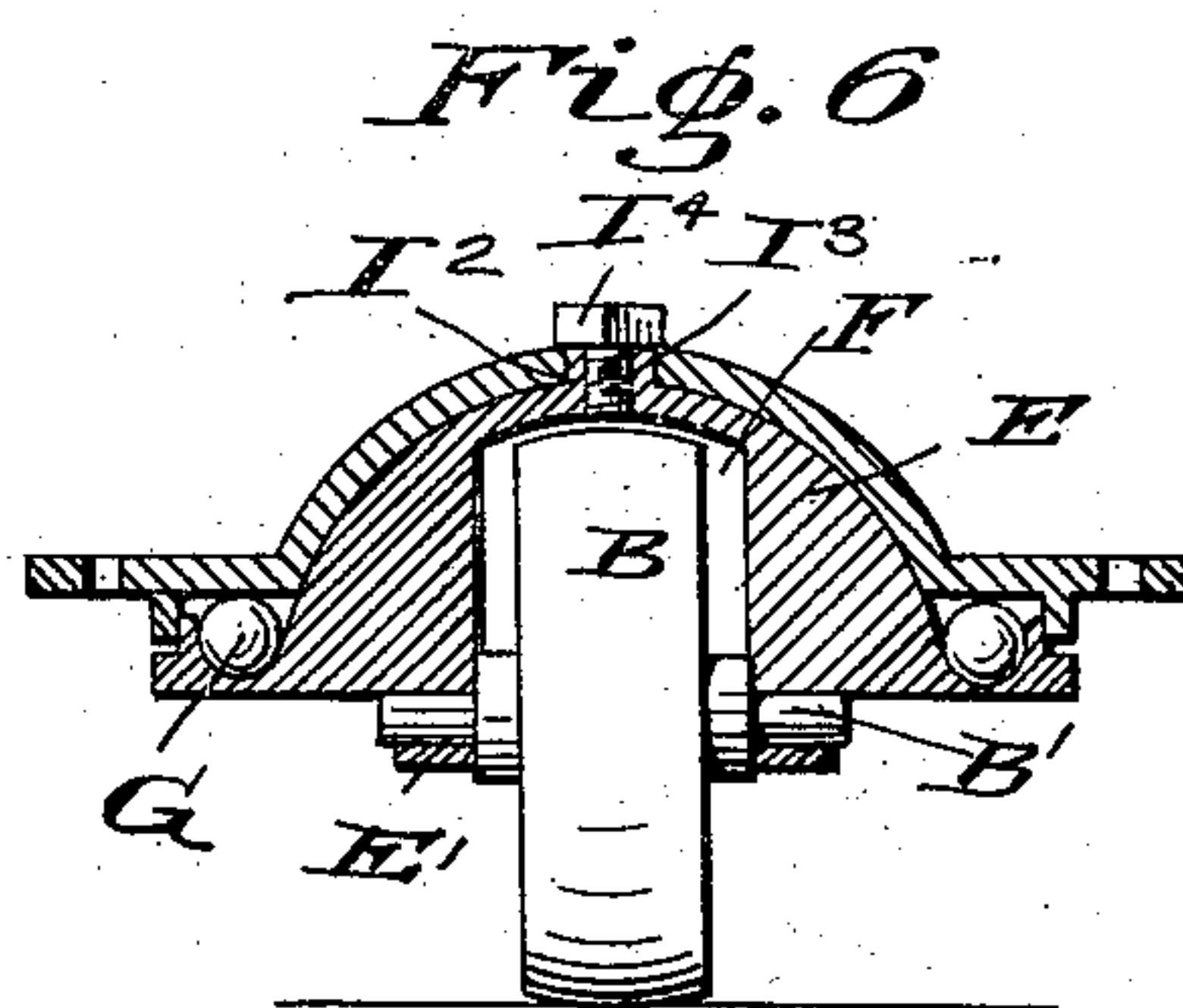
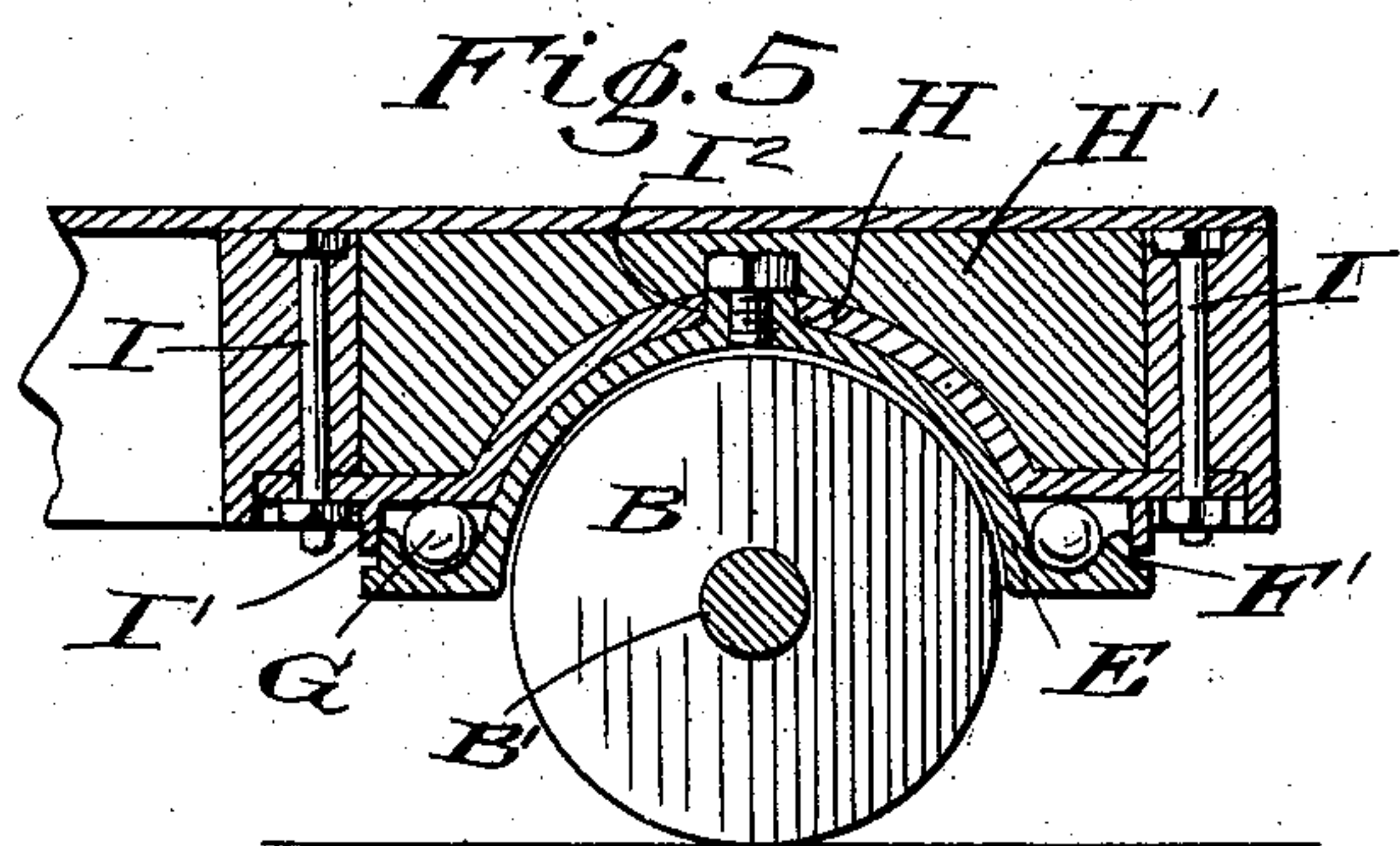
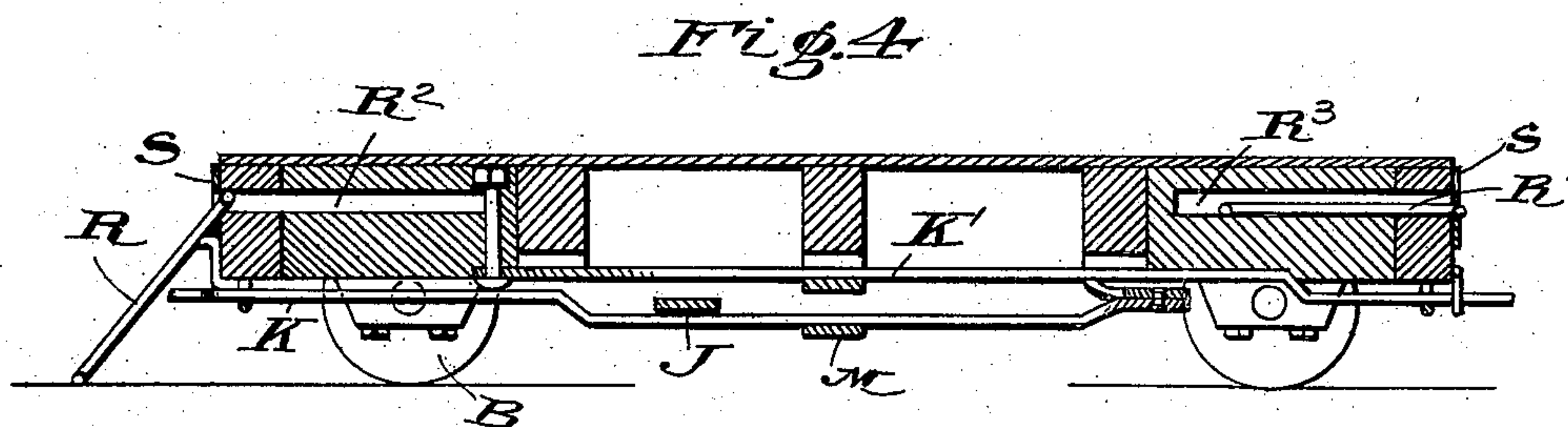
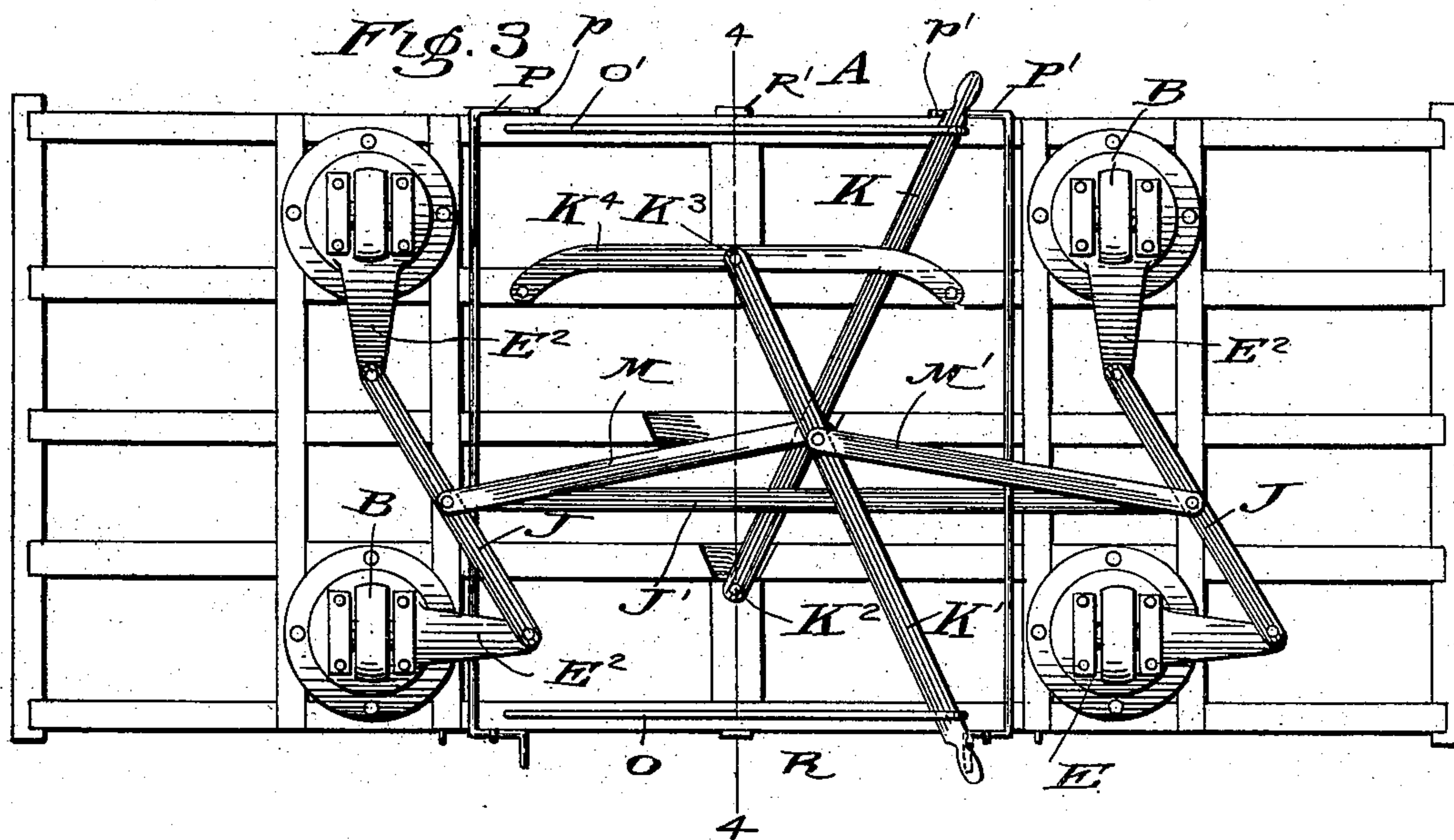
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2 Sheets—Sheet 2.

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Witnesses:

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UNITED STATES PATENT OFFICE.

MONROE BLACKBURN, OF BEDFORD, INDIANA.

TRUCK.

SPECIFICATION forming part of Letters Patent No. 601,231, dated March 29, 1898.

Application filed May 6, 1897. Serial No. 635,381. (No model.)

To all whom it may concern:

Be it known that I, MONROE BLACKBURN, residing at Bedford, in the county of Lawrence and State of Indiana, have invented a new and useful Truck, of which the following is a specification.

This invention relates to improvements in trucks more especially adapted for use in handling freight, packages, baggage, &c., to effect a saving of time and labor in loading or unloading cars or in handling furniture and merchandise, to effect a like saving in warehouses, stores, &c.

The object of the invention is to provide a truck-body with rollers and means for moving the rollers simultaneously to change the direction of travel of the truck from a longitudinal to a lateral direction, or vice versa.

The invention therefore consists in the parts and combination of parts shown in the drawings, described in the specification, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a truck embodying the principles of my invention. Fig. 2 is a bottom plan view of the truck, the rollers being in a position to move the truck in a longitudinal direction. Fig. 3 is a like view, the rollers being turned to move the truck in a lateral direction. Fig. 4 is a transverse sectional view of the truck, the line of section being taken at a point indicated by the line 4 4, Fig. 3. Figs. 5 and 6 are sectional detail views illustrating the manner of mounting the rollers in the frame. Fig. 7 is a detail perspective view of the roller.

Referring to the drawings, in which like letters of reference indicate corresponding parts throughout the several views, A designates the truck-frame, which may be of any well-known or preferred construction, B the truck-rollers, and C the detachable handle, provided with a bifurcated hook end c, which is adapted to engage the staple C', secured to the frame, by which means the truck may be moved longitudinally.

E designates a dome-shaped turn-table to which is secured in suitable bearings E the trunnions B' of the roller B. The turn-table is provided with an opening F in its under side, in which the upper portion of the rollers is housed, and with a circular flange forming

a groove F', which contains the antifriction-balls G.

Embedded in one of the truck-beams H' and secured thereto by means of bolts I is a casing H, in which the turn-table E fits.

The casing is provided with an annular flange I', encircling the edge of the groove in the turn-table, which acts to keep the balls G in the groove, and with an opening I², through which an upwardly-extending boss I³ upon the turn-table projects, the boss having a screw-threaded perforation into which a bolt I⁴ screws to hold the turn-table, and consequently the roller, to the casing, as shown in Figs. 5 and 6. This arrangement of securing the rollers to the truck allows of the rollers being easily turned in any direction.

In order to carry out the object of my invention, I employ suitable means for simultaneously turning and in holding the rollers in two alined positions in a longitudinal and a transverse position, respectively, with reference to the truck. As a result of this arrangement I am enabled to utilize the truck for storage purposes, &c. The truck may be moved at right angles, which greatly facilitates loading cars, &c., as the truck when loaded can be run into the car and then run longitudinally of the same into the desired position, whereby a plurality of trucks may be packed together into a minimum small space.

For the further convenience of handling my truck tracks may be arranged longitudinally of the cars, and also transverse tracks may be connected with the longitudinal tracks and leading out of the car at each side thereof upon which the rollers run. My invention also contemplates the employment of an enlarged truck provided with suitable tracks, if desired, which serves as a movable platform to receive or discharge a plurality of trucks from or into a car, respectively.

In order to revolve the rollers, each of the turn-tables E is provided with an arm E², the arms upon each end of the truck being connected by a bar J, which are connected together by means of a bar J', whereby the bars J are always in a parallel relation one to the other and the turn-tables and rollers are all turned in the same direction simultaneously.

K and K' designate the operating-levers, which are pivotally secured to the frame at K² and K³, respectively, a bar K⁴, secured to the frame, serving to raise the lever K above the lever K', and each lever K and K' is connected to the bar J by means of boss M M'. By this arrangement the rollers may be turned from either side of the frame of the truck. The operating-levers are adapted to be moved to a degree to turn the rollers a one-fourth turn—that is, from a position in longitudinal alinement with the truck to a position in transverse alinement therewith—and in order to limit the movement of the levers loops O and O' are secured to the frame in which the levers move, whereby when the levers are at one end of the loops the rollers are turned in one direction and when in the opposite end of the loops the rollers are turned in the opposite direction.

Pivotally secured to the under side of the frame are rods P P', which carry upon their ends catches p p', the catches having inclined ends whereby when the levers abut against them the levers ride beneath the catches and are automatically caught and held thereby. The catches depending from the rods act by gravitation.

R R' designates brakes, which work in slots R² R³ in plates S, secured to the sides of the frame, as shown more particularly in Fig. 4. The object of these brakes is to hold the truck stationary, when desired, in loading or unloading the same.

In operation in loading a car or in storing goods in warehouses, stores, &c., after the trunks have been loaded they are run to a point in front of the door. The rollers are then turned, and they are run into the car or room. The rollers are again turned, and they are run longitudinally and located in the position desired, when the brake is applied, and the truck is ready for transportation or storage. To remove the truck, the operation is reversed.

If desired, the rollers may be given a one-eighth turn, when they will assume an angle to each other and in this manner act as a brake.

It will then be seen that I have provided a

truck movable in two directions in longitudinal alinement with the length of the truck and in transverse alinement with the width thereof, whereby the truck can be moved at right angles and is especially adapted for the purpose stated.

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

1. In a truck, a frame, a plurality of parallel movable rollers mounted to turn thereon and means for moving the rollers simultaneously either in a position in longitudinal alinement or in transverse alinement with the truck, respectively, substantially as described.

2. In a truck, the combination of the frame, suitable casings mounted in said frame, a turn-table having rollers journaled therein working in said casing, arms carried by said turn-table suitably connected together and means in connection therewith for simultaneously turning the rollers in the same direction, substantially as shown and described.

3. In a truck, the combination of the frame, the rollers mounted to turn therein, means in connection with said arms for simultaneously turning them, levers for operating said means, and hooks or catches carried by said frame engaging the levers for holding them in position, substantially as shown and described.

4. In a truck, the combination of the frame, the rollers mounted to turn therein, arms connected with said rollers, bars connecting the arms in pairs and said bars arranged parallel to each other, a bar connecting said bars so as to cause the rollers to move together, and operating-levers connected to said bars, substantially as shown and described.

5. In a truck, the combination of the frame, the rollers mounted to turn therein, means in connection with said rollers for turning them and brakes carried in slots in the truck for holding the truck in position, substantially as shown and described.

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Witnesses:

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