VERRIE & WIGHTMAN.

Car Coupling.

No. 97,250. Patented Nov. 23, 1869.

FIG. 1

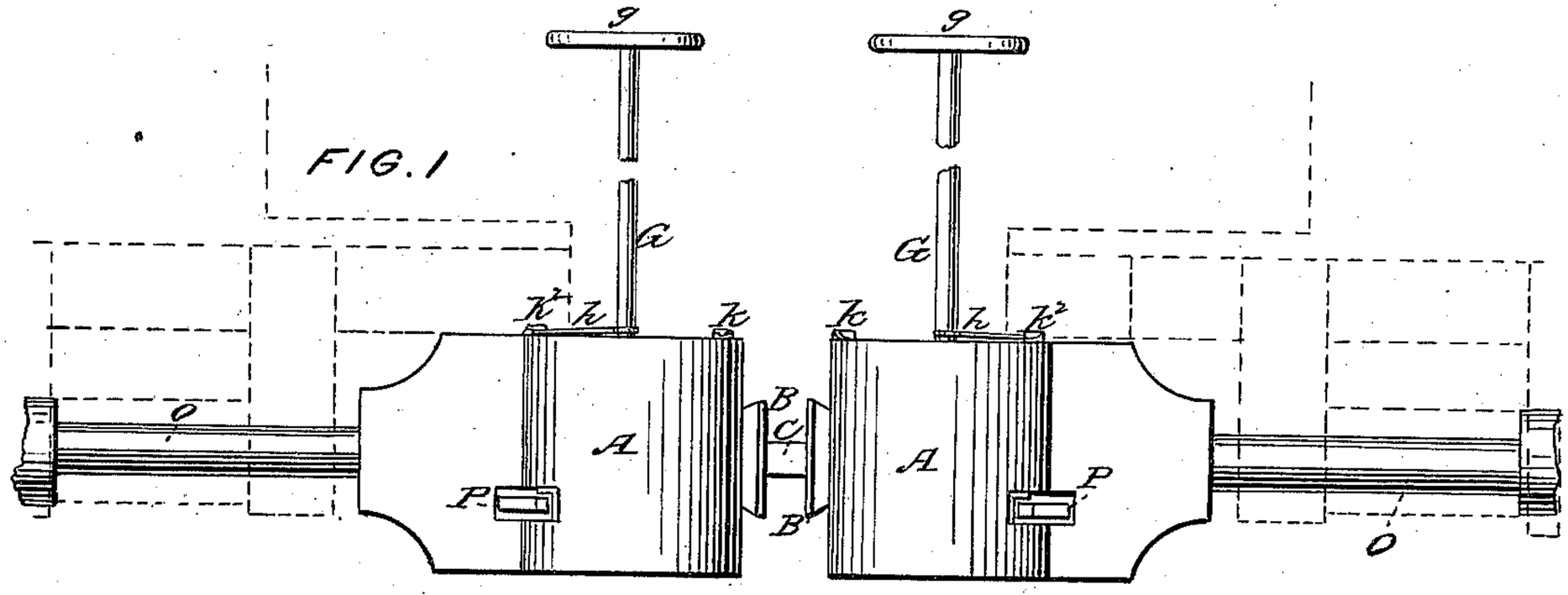


FIG. 2

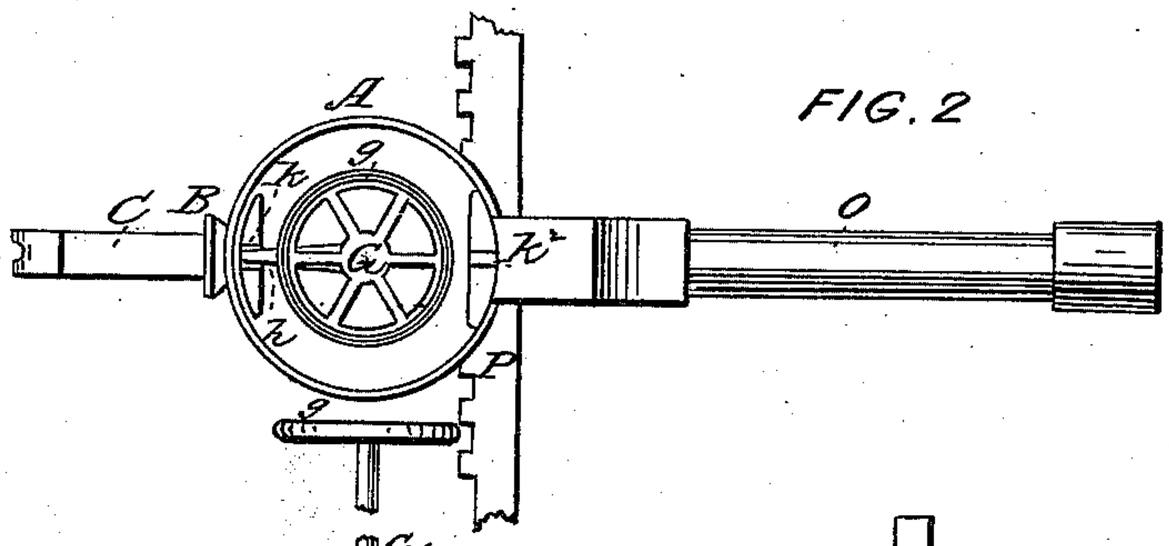


FIG. 6

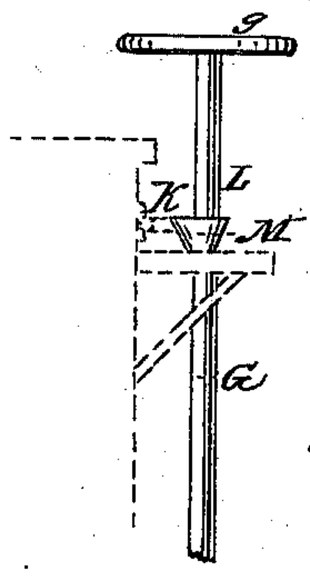


FIG. 3

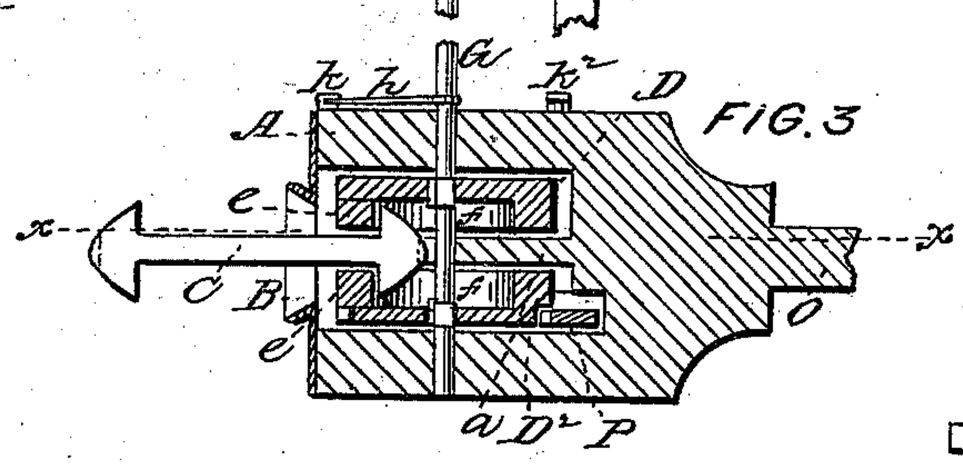


FIG. 5

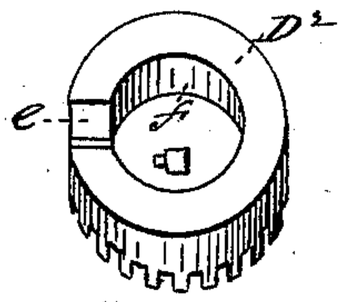
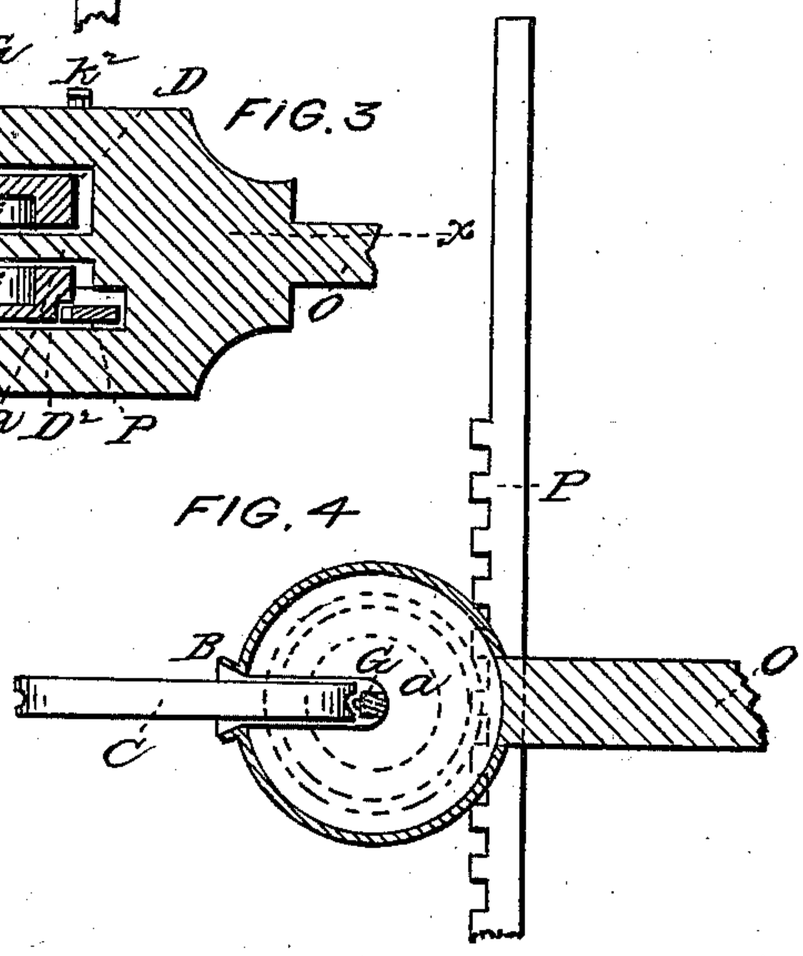


FIG. 4



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HENRY B. VERRIE AND DANIEL G. WIGHTMAN, OF NORTH KINGSTON, RHODE ISLAND.

Letters Patent No. 97,250, *dated November* 23, 1869.

IMPROVED CAR-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, HENRY B. VERRIE and DANIEL G. WIGHTMAN, both of North Kingston, county of Washington, and State of Rhode Island, have invented certain Improvements in Lock-Couplings for Railroad-Cars, of which the following is a specification.

The nature of our invention consists in constructting the coupling in such a manner, that railroad-cars may be readily caught and connected together, so as to avoid the necessity of a person standing between the cars to couple them, the same being accomplished by means of circular disks, into which the connecting-link enters on the approach of the cars, and on turning a shaft connected with the disks, and surmounted by a wheel in the hands of the brakeman, the said link is locked and held firmly until a reverse movement of the shaft and disks, when the cars are uncoupled, as we will further explain by reference to the accompanying drawings, of which—

Figure 1 is a side elevation of our invention;

Figure 2, a plan or top view;

Figure 3, a vertical section, showing link in action;

Figure 4, a horizontal section on *x x;*

Figure 5, a perspective view of the toothed disk; and

Figure 6, a view of the coupling-shaft, so applied as to be operated from the roof of a freight-car.

In the said drawings—

A is the drum which encloses the disks.

This drum has a flaring mouth or buffer, B, into which the connecting-link C enters as the cars approach.

D D^2 are the disks, having entrance-openings, *e e*, into which the link C enters, and recesses, *f f*, into which the link in like manner enters, and is held by the disks.

G is the key or coupling-shaft, on which the disks are made fast, and by which they are operated. This shaft may extend above the roof when the coupling is used on freight-cars, as shown in fig. 6.

And *a* is a portion of the drum, which acts as a bunter in sustaining the coupling-shaft, as the link C is forced against it.

On the upper side of the drum, and attached to the shaft G, is the lock, consisting of an arm, *h*, attached to the shaft, and catches, *k* k^2, attached to the drum, for the purpose of locking the car-coupling, as will be hereinafter explained.

L is another lock, consisting of a cup, M, attached to the shaft G, and a drop-catch, N, this lock being intended for freight-cars, while one or both locks could be used if desired; and

O is the rod or draw-bar by which the coupling is attached to the frame embraced by rubber or other springs in the usual manner.

The operation of our invention is as follows:

As the cars approach each other, the link C will enter the flaring mouth B of the drum, and through the openings *e e* into the recesses *f f*, in the disks D D. Now, by laying hold of the hand-wheel *g*, on the coupling-shaft G, and turning the disks half round, or until the arm *h* is moved round from the catch *k* to the catch k^2, the coupling-link C will be firmly held and locked until a reverse movement of the coupling-shafts and disks, when the coupling will be unlocked, and when it may be desired to lock or unlock the coupling by a person standing on the road, outside of the cars, by laying hold of the rack P, which engages with the toothed disk D^2, and drawing or pushing the rack backward, the disks will be rotated, and the arm *h* carried from the catch *k* to the catch k^2, for locking the coupling, and by a reverse movement will be unlocked.

We would remark that because of the circular recesses in the disks, the coupling will adapt itself to the cars while rounding curves, and will hold the cars steadily in position, nor will it be necessary to slacken speed for the purpose of uncoupling the cars.

We claim, as our invention—

The drum A, bunter *a*, the disks D D^2, the rack P, the arm *h*, and catches *k* k^2, in combination with the key or coupling-shaft G, and link C, all arranged and operating substantially as and for the purposes described and set forth.

In testimony whereof, we have hereunto set our signatures, this 8th day of October, A. D. 1869.

HENRY B. VERRIE.
DANIEL G. WIGHTMAN.

Witnesses:

ARTHUR NEILL,
JAIRUS CRANDALL.