

(No Model.)

L. WILKERSON.
CAR COUPLING.

No. 252,562.

Patented Jan. 17, 1882.

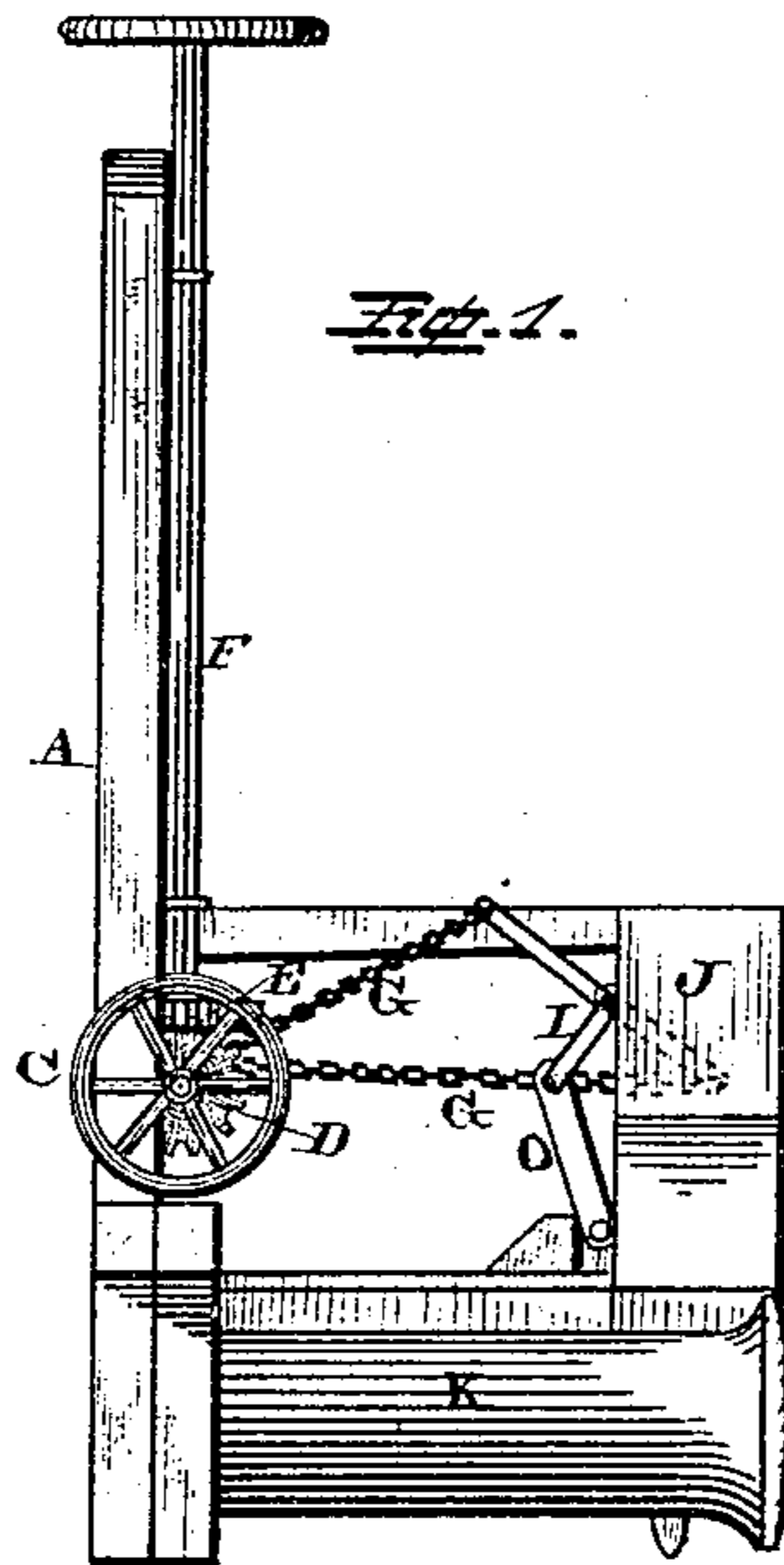


Fig. 3.

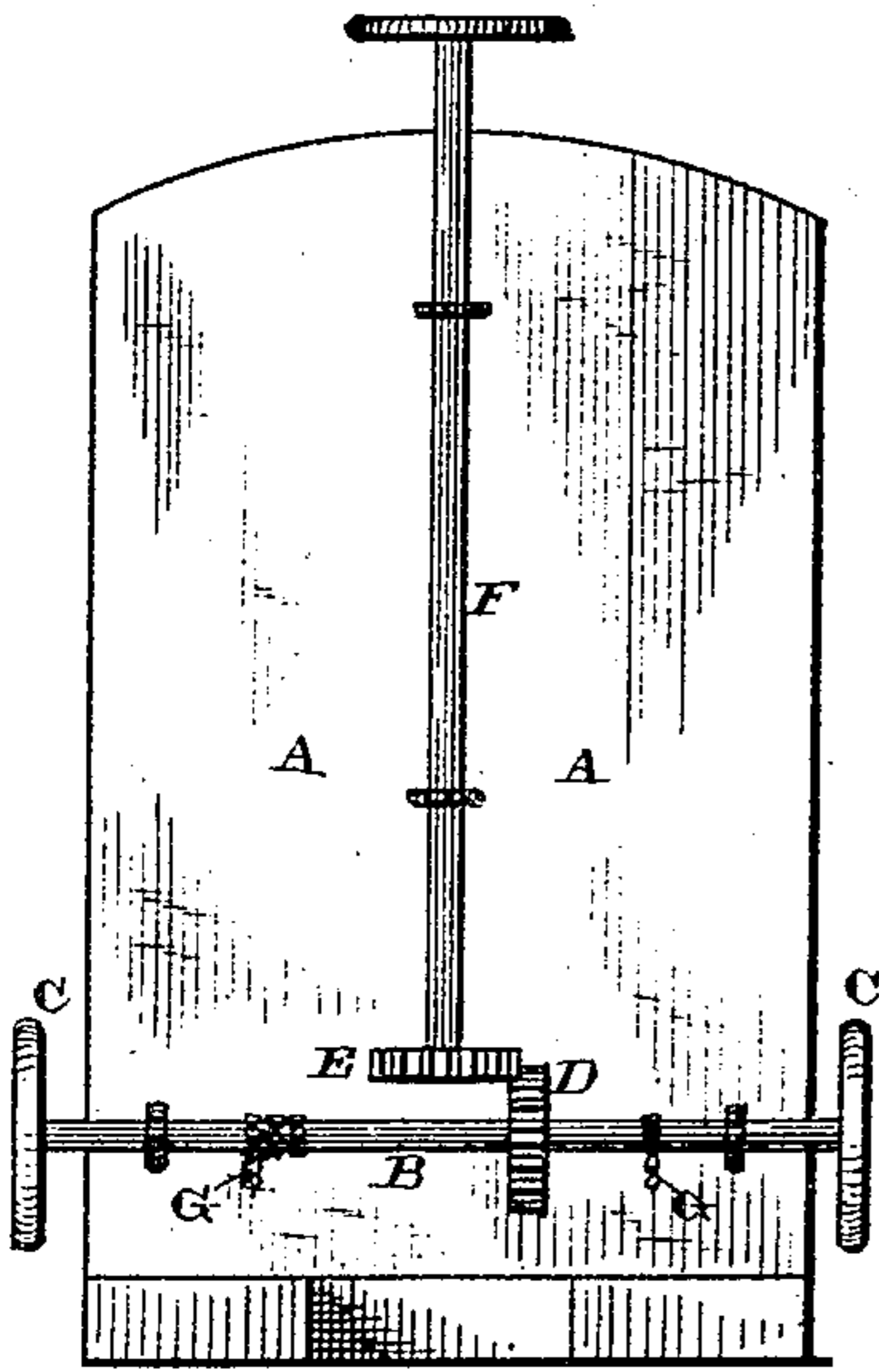


Fig. 2.

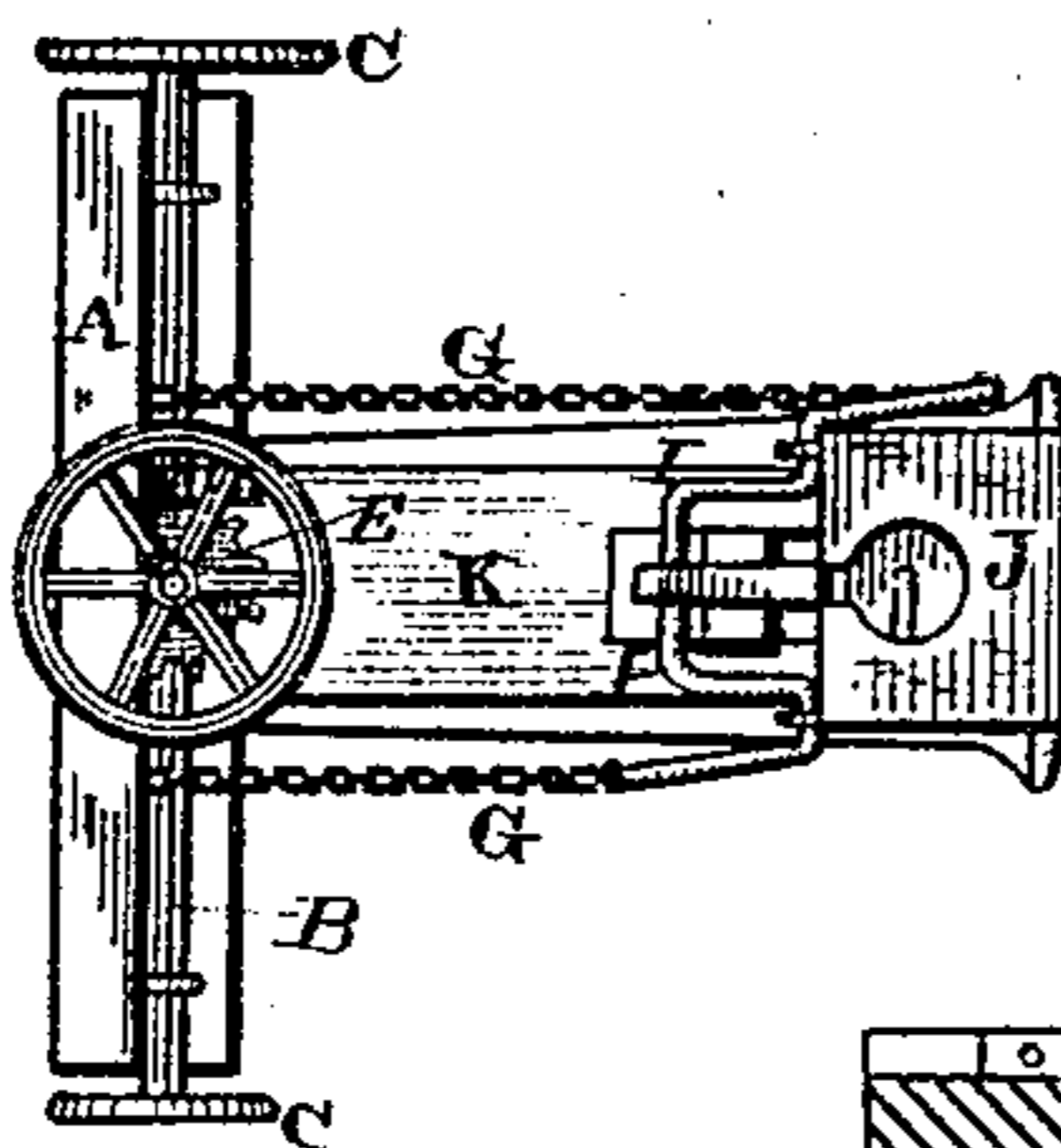
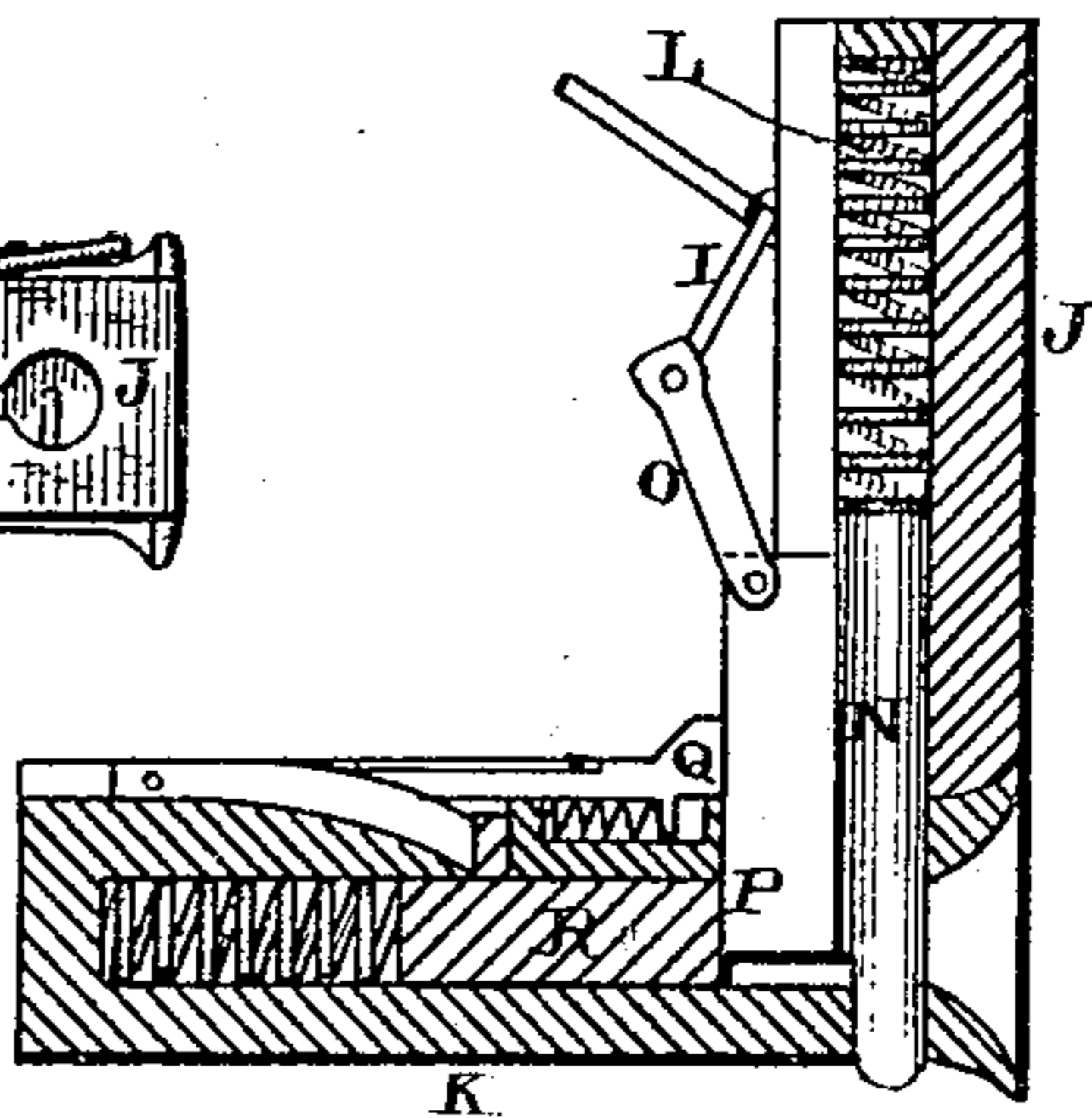


Fig. 4.



Witnesses.

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per
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UNITED STATES PATENT OFFICE.

LAFAYETTE WILKERSON, OF SCIPIO, INDIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 252,562, dated January 17, 1882.

Application filed November 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, LAFAYETTE WILKERSON, of Scipio, in the county of Jennings and State of Indiana, have invented certain new and useful Improvements in Car-Couplings; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in car-couplings; and it consists in the combination of a shaft which extends horizontally across the end of the car, a shaft which extends vertically up the end of the car, and which is connected to the horizontal shaft by means of suitable gear-wheels and connecting-chains, a cranked rod or shaft which has a partially-revolving movement, and a spring-actuated coupling-pin which is connected to the cranked rod or shaft, whereby, when the support upon which the pin is held in an elevated position is pushed back, the pin will be forced by its spring through the coupling-link.

The object of my invention is to couple and uncouple cars both from the top and the side of the car without the brakeman having to venture in between them, and thereby endanger both life and limb.

Figure 1 is a side elevation of my invention. Fig. 2 is a plan view of the same. Figs. 3, 4, are detail views of the same.

A represents the end of a freight-car which has the shaft B secured in suitable bearings and extending horizontally across its end. To each end of this shaft is secured a suitable hand-wheel, C, so that the shaft can be operated from either side of the car. Near the center of this shaft is secured a suitable gear-wheel, D, which meshes with a second gear-wheel, E, which is secured to the lower end of the shaft F, which extends vertically up the end of the car and above its top. By turning either one of these shafts the other one will be operated at the same time, thus enabling the coupling to be operated from either side of the car or from the top, as may be necessary.

To the horizontal shaft B are secured the two chains G, which are made to wrap around the shaft in opposite directions, so that by turn-

ing the shaft in one direction one chain will be wrapped upon it while the other one is being unwrapped. The outer ends of these two chains are secured to opposite ends of the crank rod or shaft I, which has its central part formed into a crank, while its two ends are bent in opposite directions, so that when either one of the chains is tightened upon the shaft the rod will be made to partially revolve. This cranked rod is secured in suitable bearings, which are attached to the inner side of the vertical guide J, which rises any suitable distance above the top of the draw-head K, and in which is placed a suitable coiled spring, L, which bears down upon the top of the coupling-pin N. In the top of this guide will be placed a regulating-screw, so that the tension of the spring can be increased and decreased at will. Through the rear side of this guide is made a slot, in which the coupling-pin is held, and by means of which the pin is made to project sufficiently far into the guide to allow the spring to bear down upon its top. This coupling-pin is connected to the crank-rod by means of the pitman O, so that when the cranked rod is turned in one direction by the movement of the chains the coupling-pin will be raised or lowered, as desired.

Upon the rear edge of the coupling pin is formed a shoulder, P, which catches over the top of a suitable sliding projection, Q, and which projection holds the pin in an elevated position until it is pushed back so as to allow the pin to be forced by the spring down through the draw-head and coupling-link. Also placed inside of the draw-head is a suitable sliding spring-block, R, against which the coupling-link strikes, and which, in moving backward, carries the spring-supporting block with it, so that the support is moved from under the pin to allow the pin to fall.

By means of the construction above described it will be readily seen that by means of a shaft, the connecting-chains, the cranked rod, and the spring-actuated pin the coupling can be set to couple either from the side or the top of the car, or can be uncoupled whenever so desired.

Having thus described my invention, I claim—

1. The combination of one or more operating shafts which are connected to the end of

the car, suitable connecting-chains, a cranked rod, and a spring-actuated coupling-pin, the chains being wound upon the operating-shaft in opposite directions and connected to opposite ends of the cranked rod, substantially as shown.

2. The guide which is secured upon the top of the draw-head, and which is slotted on its rear side so as to allow the pin to project through, a spring placed inside of the guide and bearing upon the top of the pin, and a coupling-pin having a shoulder formed on its rear edge, in combination with a spring-supporting block and a sliding spring-block which actuates the supporting-block, substantially as described.

3. The combination of one or more shafts secured to the end of the car, with the two connecting chains which are made to wind in opposite directions upon the horizontal shaft, and which have their outer ends connected to a cranked rod which operates the spring-actuated coupling-pin, substantially as set forth.

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

LAFAYETTE WILKERSON.

Witnesses:

TAYLOR ERWOOD,
DAVID OBERMYER.