

(No Model.)

W. A. SHARP.

DUMPING CAR.

No. 430,546.

Patented June 17, 1890.

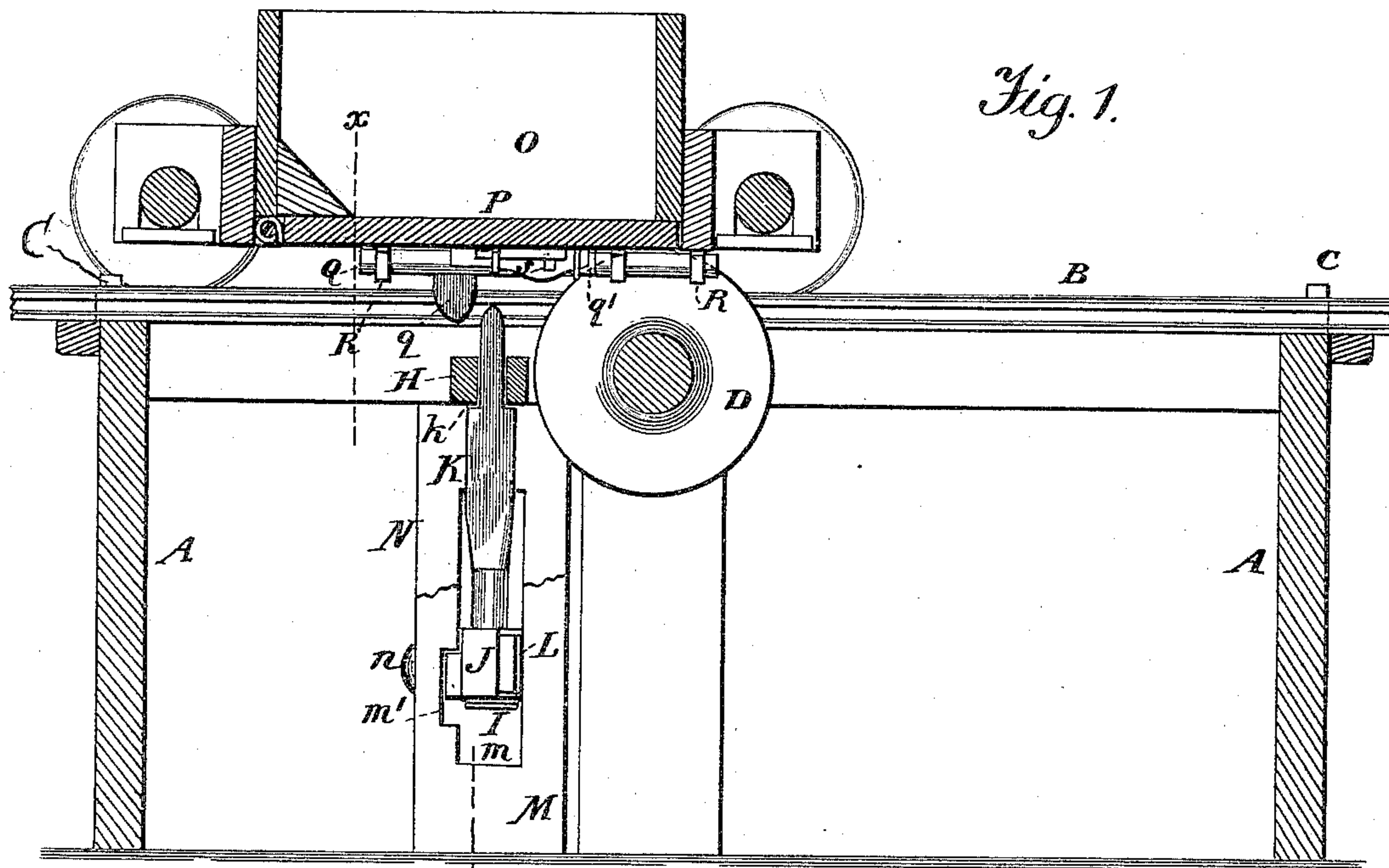


Fig. 1.

Fig. 2.

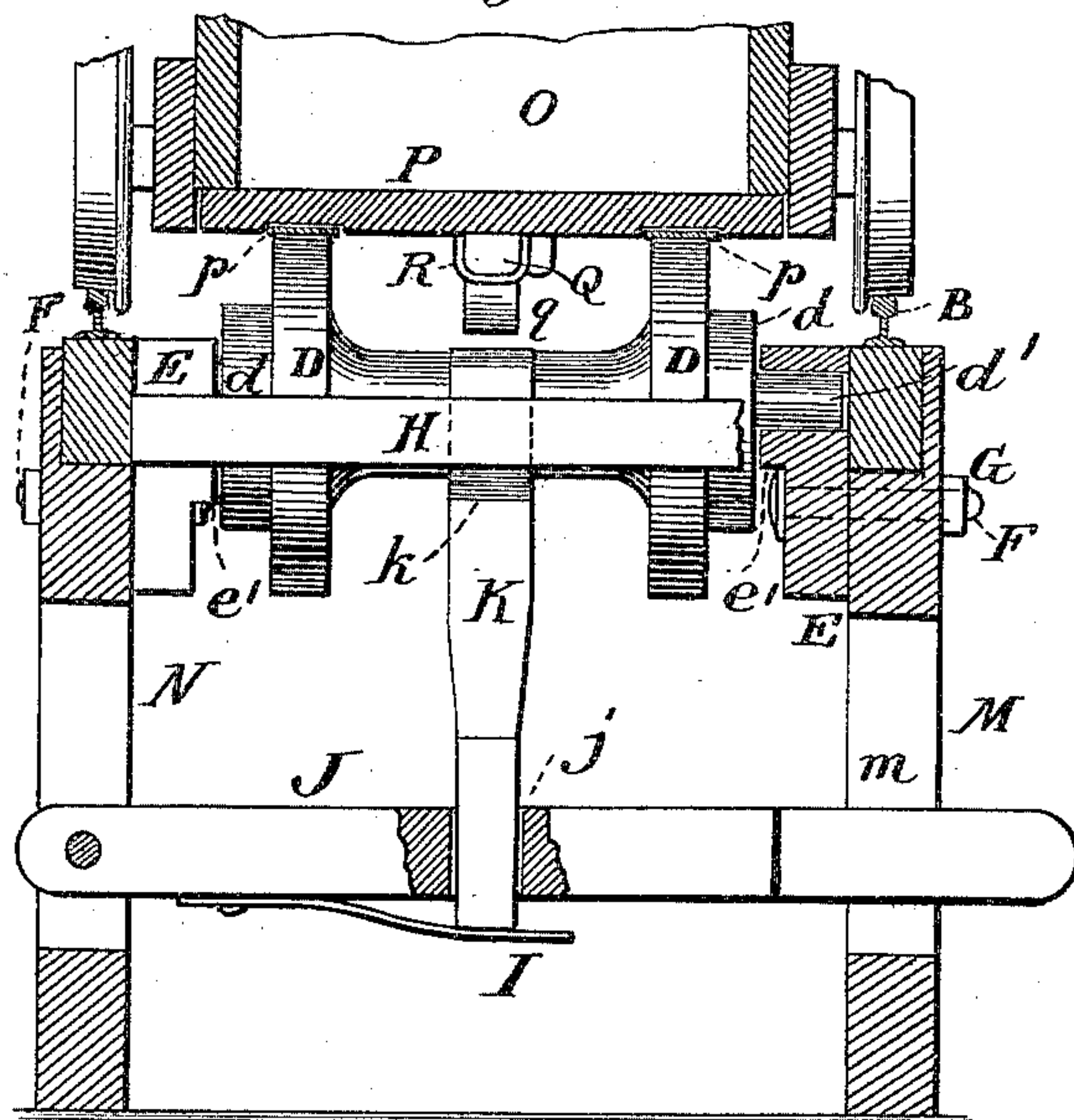


Fig. 3.

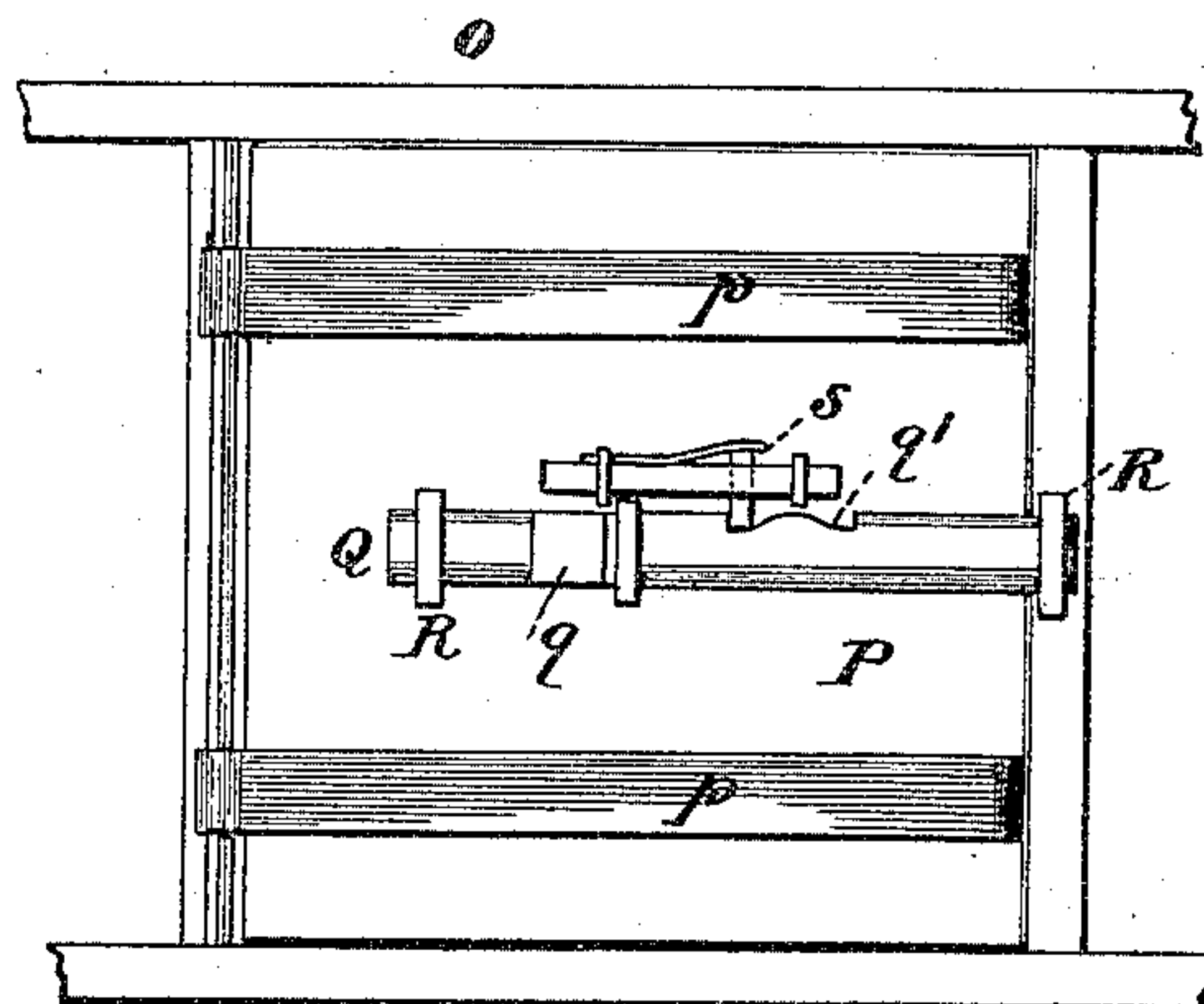
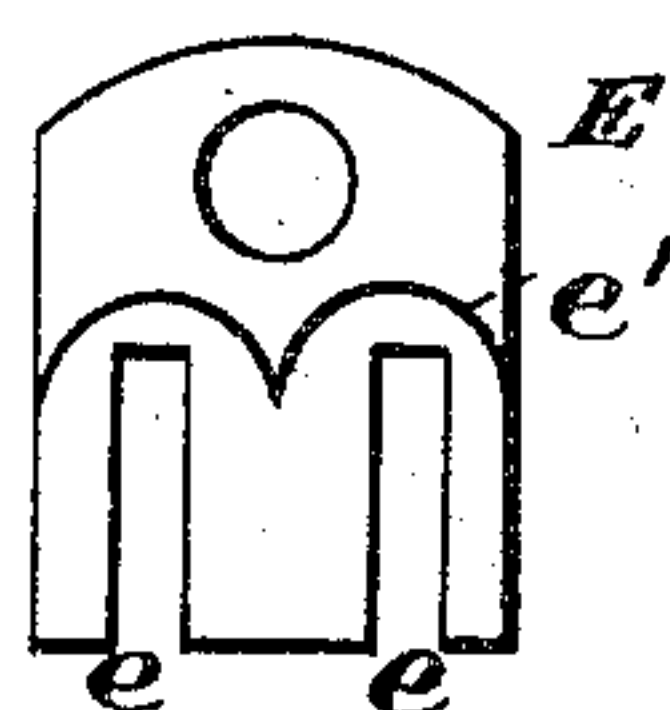


Fig. 4.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## DUMPING-CAR.

SPECIFICATION forming part of Letters Patent No. 430,546, dated June 17, 1890.

Application filed February 5, 1890. Serial No. 339,292. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. SHARP, a citizen of the United States, residing at Meadow Bluff, in the county of Greenbrier and State of West Virginia, have invented certain new and useful Improvements in Dumping-Cars; 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.

The special object of the invention is to make a dumping-car which will be convenient for filling carts, wagons, other cars, or coal-bins.

The invention will first be described in connection with the drawings, and then pointed out in the claims.

Figure 1 of the drawings is a vertical longitudinal section of my dumping-car and of means for causing it to dump. Fig. 2 is a transverse section on line  $x x$  of Fig. 1. Fig. 3 is a bottom view of a portion of the car, and Fig. 4 is a detail.

In the drawings, A represents the dumping-fixture, with the track B B on top and arranged to connect with a railroad-track.

C C are two stops, of which one pair is at each end of the dumping-track, and D D two rollers, preferably made in one piece with the hubs  $d$  and the journals  $d'$ . E E are the bearings for these journals, and are provided with two open slots  $e e$  and a stop-shoulder  $e'$ , so that they may be easily arranged and adjusted in height on the clamping-bolts F, which are provided with the end nuts G.

Between that end of the dumping-fixture which connects with the railroad and the rollers D D is made fast a cross-bar H, and through the middle of this plays loosely a vertical trip-bar K, with the limiting-shoulder  $k$ . This trip-bar K passes with its lower end through a hole  $j$  in the cross-lever J and is supported by a flat plate-spring I, which is fastened at one end to the lever, while the other end crosses the bottom of the hole  $j$ . The lever also has on one side a plate-spring L, the lever and spring both passing through a vertical slot  $m$  in the perpendicular piece M, while

the spring holds the lever in the notch  $m'$ , so that the trip-bar K shall extend the desired distance above the cross-bar H. The lever J is fulcrumed by means of a pivot  $n$  in the slotted perpendicular piece N.

O represents a freight-car, with the hinged bottom P, on the under side of which works a slide-bolt Q in the keepers R. One of these keepers is on the frame of the car and the others on the hinged bottom P. The bolt Q also has a side recess  $q'$ , with the two shoulders at the ends thereof, and in this recess works stop-pin S, so as to limit the throw of the bolt in both directions. On the under side of the bolt, which is placed longitudinally in the middle of the hinged bottom P, is formed a curved and downward projection  $q$ , which engages the upper beveled end of the trip-bar K, so that the bolt may be shot back and the bottom P unfastened as soon as the strap-extensions  $p$  ride upon the rollers D D, so as to prevent the door from falling open until the said bottom has passed the rollers. Then the bottom P swings down into a perpendicular position and allows the whole load to be emptied into a bin, wagon, or car beneath it. After being emptied the car is carried back, when the wheels D close the bottom and the bolt is locked as soon as the projection  $q$  strikes the trip-bar K.

The straps  $p p$ , on the under side of car-bottom, are rigid with the hinges, whereby the straps are enabled to turn and serve the purpose of taking the friction and wear of the wheels D instead of the car-bottom.

What I claim as new, and desire to protect by Letters Patent, is—

1. The combination, with a car having a hinged bottom held horizontally by the slide-bolt, with the downward projection  $q$ , of a tracked dumping-fixture A, carrying a perpendicular trip-bar K, which will engage said projection and unlock the bolt as car moves along, for the purpose described.

2. The combination, with a tracked dumping-fixture having a trip-bar and a car having a hinged bottom supported horizontally by a slide-bolt having a subjacent downward projection, of a pair of rollers arranged just in front of the trip-bar and serving to hold the hinged bottom closed until the said bottom is directly over car, wagon, or bin into

which its contents are to be emptied, as shown and described.

3. The combination, with the dumping-fix-  
ture and rollers D D, of the two bearings E  
5 E, having open slots *e e*, and stop-shoulder *e'*,  
the screw-bolts F, and the nuts G, substan-  
tially as shown and described.

4. The combination, with the loose trip-bar  
K, having the shoulder *k*, of the slotted end  
10 pivoted lever J, having the hole *j*, the plate-  
spring I at the bottom of said hole *j*, the

plate-spring L on the side of said lever, and  
the perpendicular piece M, having the slot *m*,  
with the side notch *m'*, as and for the purpose  
set forth.

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

WILLIAM A. SHARP.

Witnesses:

T. B. SHARP,

H. E. SHARP.