

(No Model.)

R. K. DORSEY.  
CAR COUPLING.

No. 497,537.

Patented May 16, 1893.

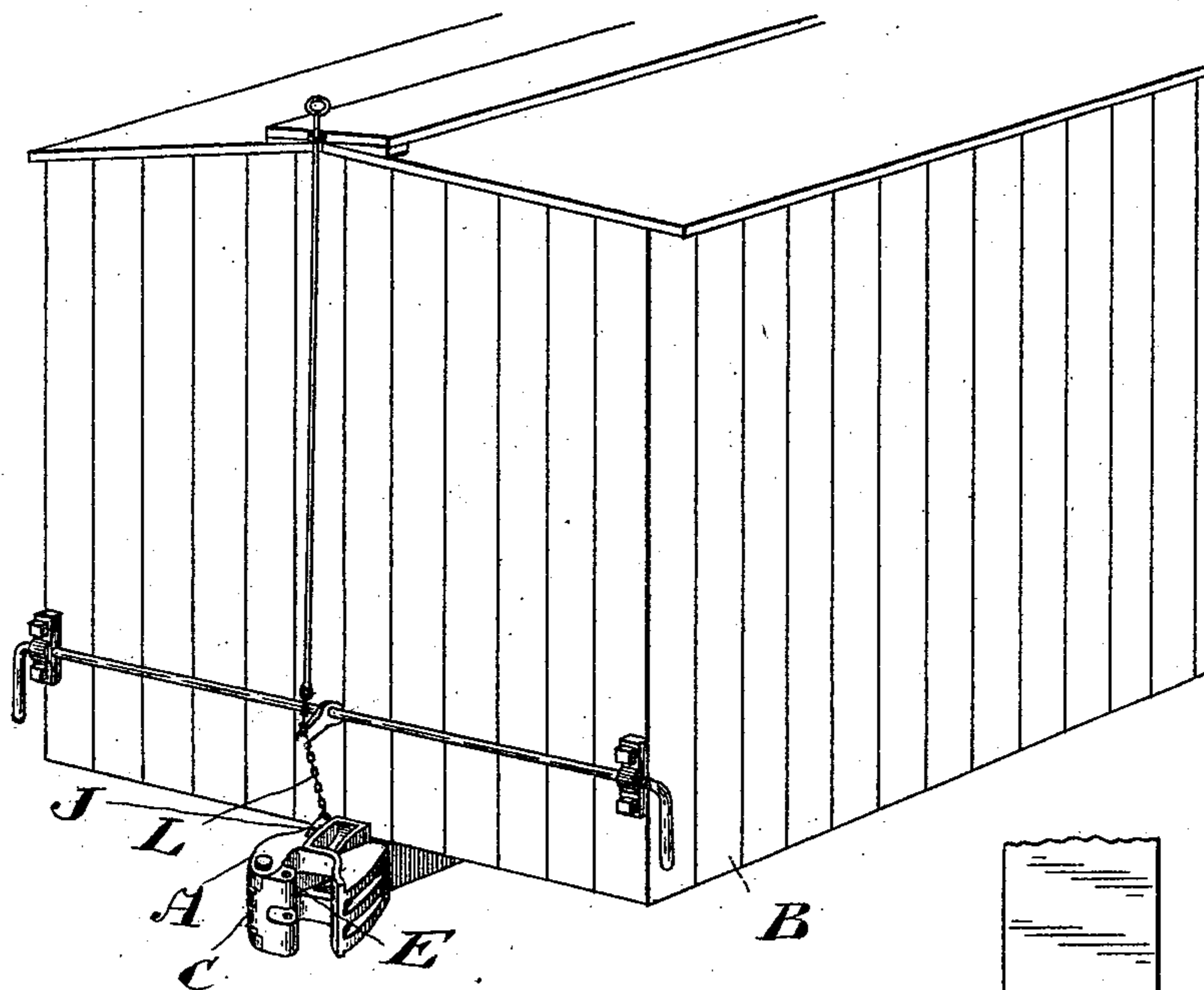


Fig. 1

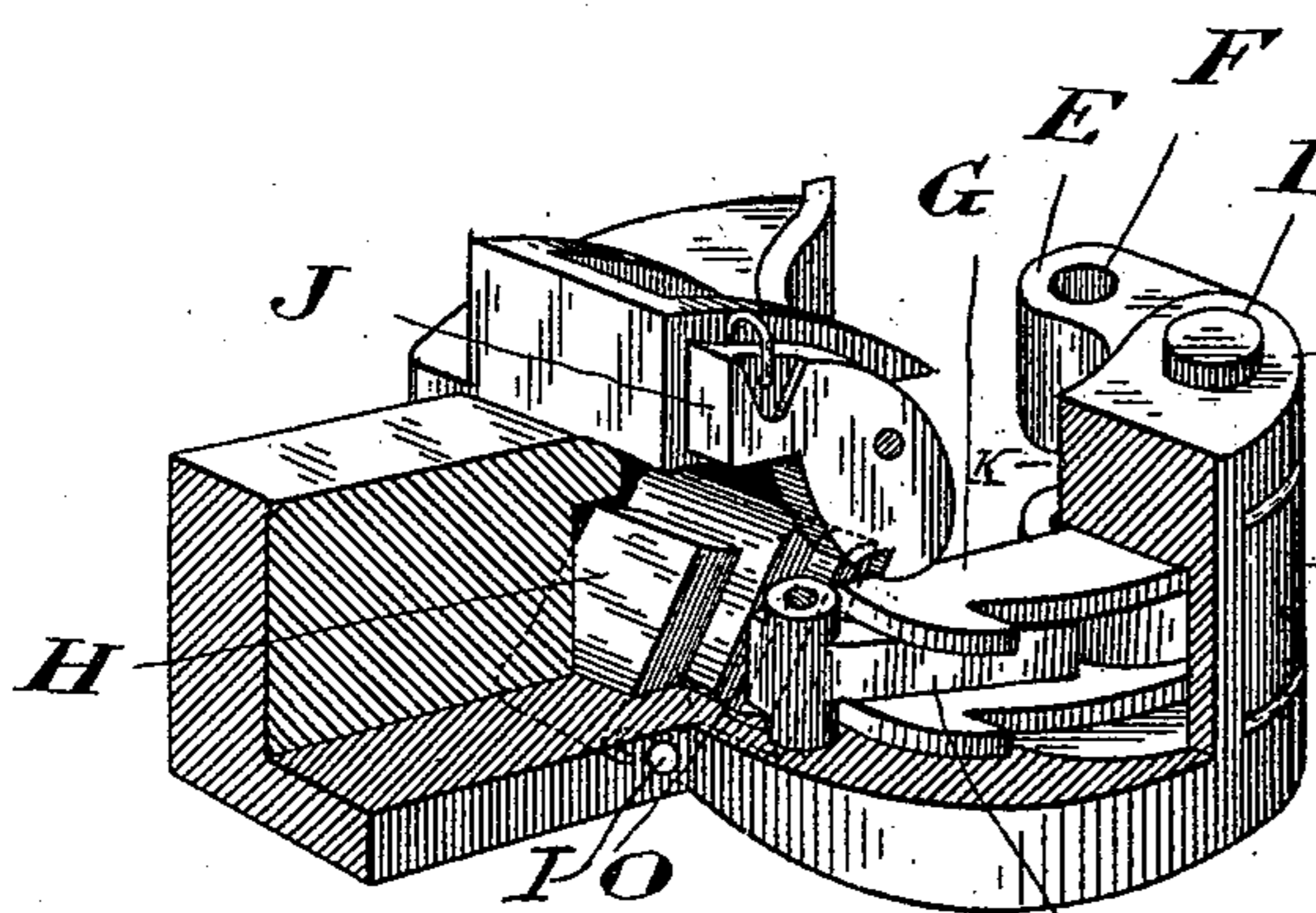


Fig. 2

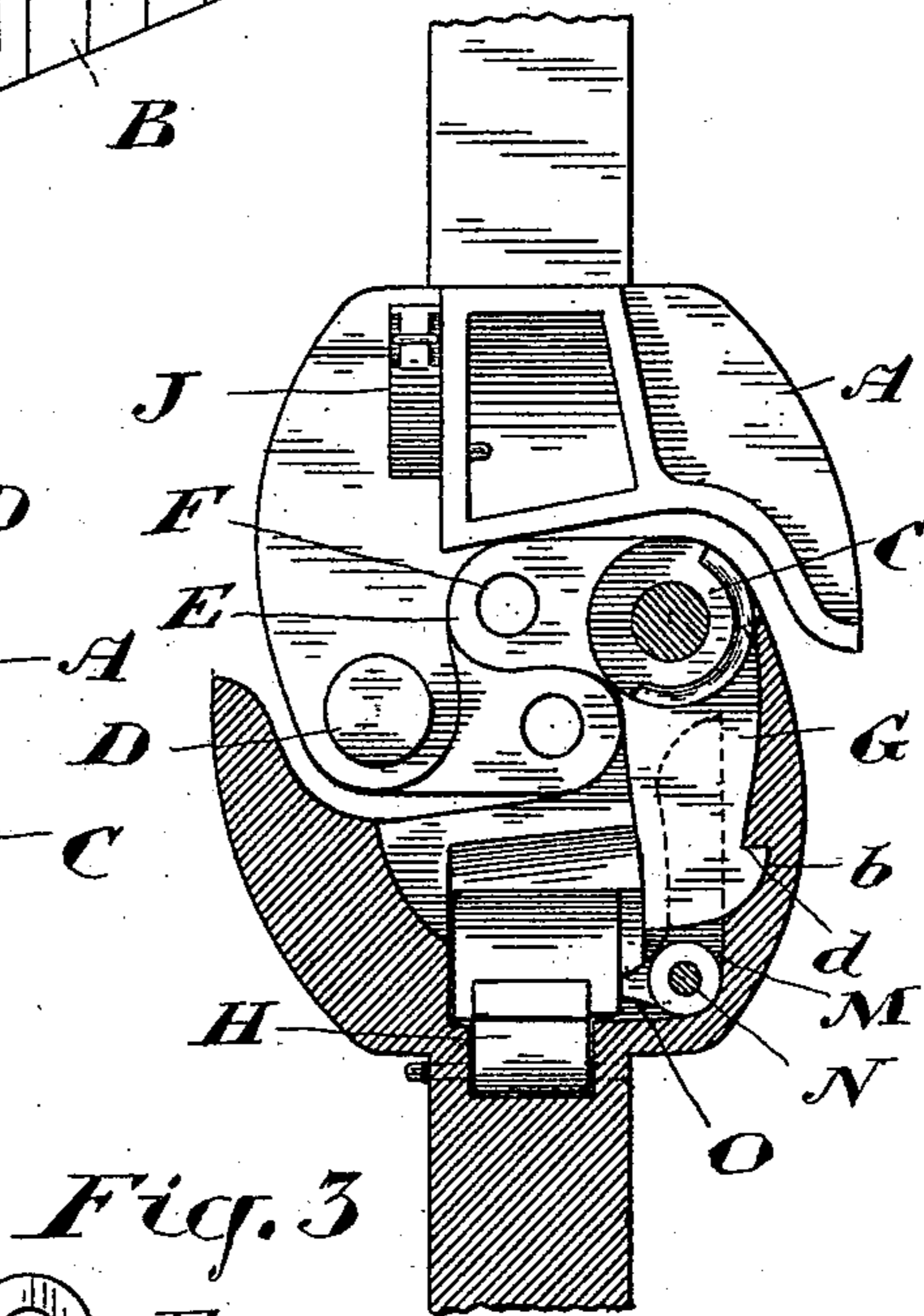


Fig. 3

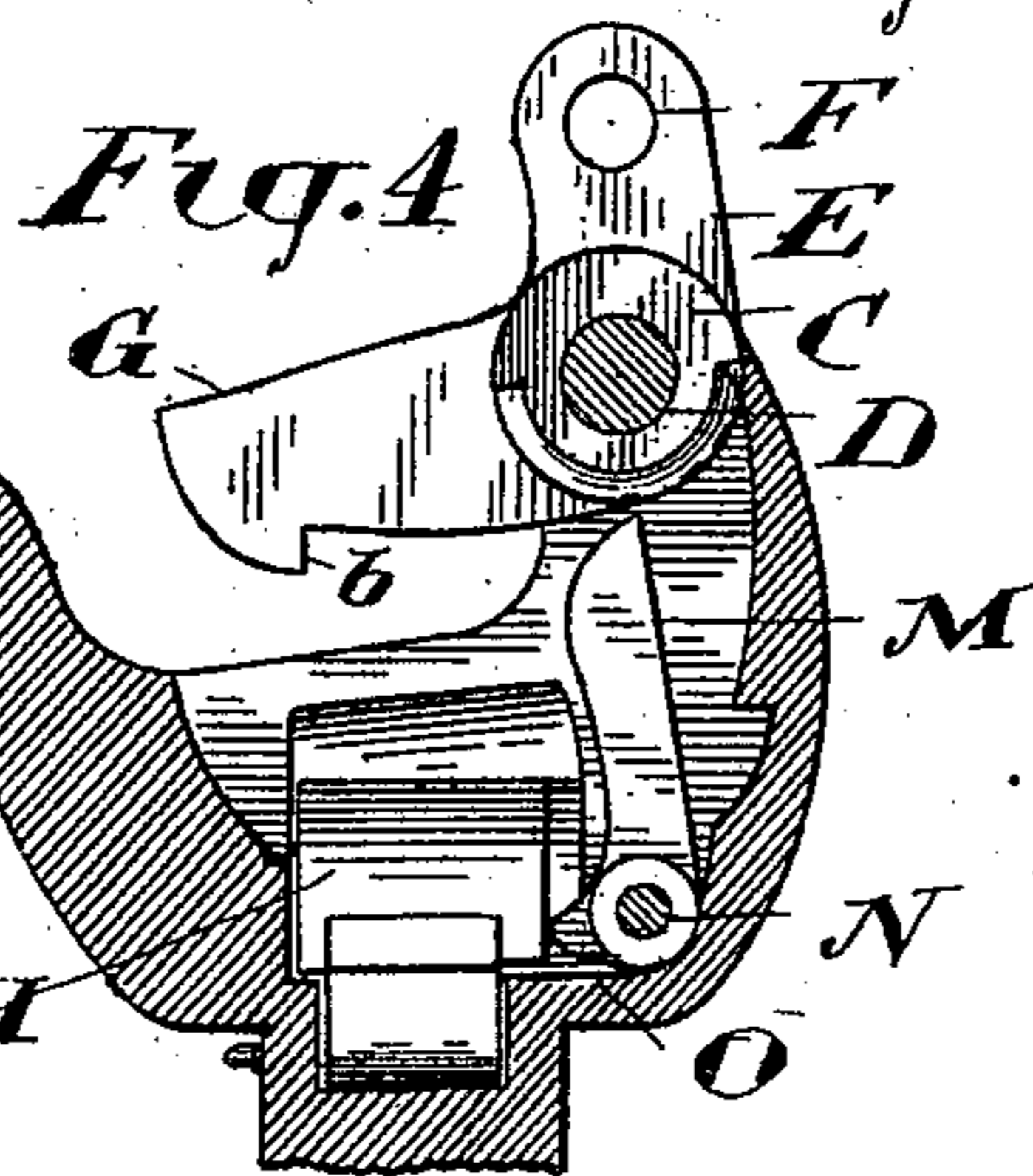


Fig. 4

Witnesses

W. G. McMillan  
John E. Cameron

Inventor

Richard K. Dorsey  
by Donald C. Ridout & Co.  
*attys.*

# UNITED STATES PATENT OFFICE.

RICHARD K. DORSEY, OF ALLANDALE, CANADA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 497,537, dated May 16, 1893.

Application filed September 10, 1892. Serial No. 445,528. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD K. DORSEY, of the village of Allandale, in the county of Simcoe, in the Province of Ontario, Canada, have invented a certain new and Improved Automatic Car-Coupler, of which the following is a specification.

The object of the invention is to provide a simple automatic car coupler capable of coupling with an ordinary link and pin draw-head, and it consists in the arrangement of parts hereinafter more particularly explained and then definitely claimed.

In the accompanying drawings Figure 1, is a perspective view of my improved automatic draw-head connected to the end of a freight car. Fig. 2, is a perspective view of my improved draw-head partially in section to expose the interior construction. Fig. 3, is a plan showing two draw-heads coupled together. Fig. 4, is a sectional plan of one of the draw-heads.

A, represents the draw-head which is secured in the usual manner to the bottom of the car B.

C, is a block pivoted to the draw-head A, by the pin D.

E, is an arm extending from and forming part of the block C, and through which a pin hole F, is made.

G, is an arm extending at about right angles from the arm E, and shaped as indicated to fit into a recess made in the draw-head A.

H, is a swinging block pivoted at I, in the recess made in the draw-head A, and designed to fall toward the mouth of the draw-head A, to an angle of about forty-five degrees.

J, is a latch pivoted in the mouth of the draw-head A, and shaped so that it may be caused to engage with the block H, and tilt it back on its pivot.

In Fig. 4, the moving parts in the draw-head are arranged as they appear when set to uncouple, while in Figs. 1, 2 and 3, they are set in their coupled position.

In Fig. 4, it will be observed that the arm G, is set forward clear of the swinging block H, and that the arm E, extends forwardly.

When the draw-heads are to be coupled together, the arm E, comes in contact with the arm G, on the opposite draw-head pushing the

said arm G, back clear of the swinging block H, which moves back to permit the arm G, to pass and immediately when it passes said block H, falls forward behind the arm G, thereby locking it in position, as indicated in Figs. 2 and 3. The block C, being simultaneously operated in both draw-heads, the two arms E, are thrown, as shown in Fig. 3, to come opposite to each other and thus couple together, as indicated in the said figure. In order to relieve the strain on the pin D, a notch b, is made in the back of the arm E, which notch fits behind and engages with a shoulder d, formed inside the mouth of the draw-head A.

Should it be necessary to connect my draw-head with an ordinary link and pin draw-head, the link would be inserted in the recess K, made in the arm E, and the ordinary pin may then be inserted through the hole F, thus forming the connection desired.

In order to uncouple the car when automatically connected as described, the latch J, is drawn upon by the chain L, so as to raise the block H, clear of the face of the arm G, which arm is thrown out toward the mouth of the draw-head A, by the action of the arm M, which is pivoted at N, and has a projection O, formed on it which extends behind the swinging block H, so that the said swinging block when thrown back by the action of the latch J, comes in contact with the projection O, thus rocking the arm M, on its pivot N, and causing the arm M, to push the arm G, toward the mouth of the draw-head and clear the swinging block H.

In Fig. 1, I show means for operating the latch J, from the top of the car or from either side thereof.

What I claim as my invention is—

1. A block C pivoted in the mouth of the draw-head A and having the arms G and E extending therefrom, in combination with a swinging block H pivoted at I, and a pivoted latch J arranged in front of said block H and controlling the position thereof, substantially as described.

2. A block C, pivoted in the mouth of the draw-head A, and having extending from it the arms E, and G, the arm M, pivoted at N, and extending behind the arm G, in combina-

tion with the swinging block H, operated by a latch J, and arranged to engage with a projection O, formed on the pivoted arm N; substantially as and for the purpose specified.

- 5 3. A block C, pivoted in the mouth of the draw-head A, and having extending from it the arms E, and G, a notch b, formed in the arm G, and arranged to engage with the shoulder D, on the draw-head A, the arm M, piv-  
10 oted at N, and extending behind the arm G, in

combination with a swinging block H, operated by a latch J, and arranged to engage with a projection O, formed on the pivoted arm N, substantially as and for the purpose specified.

Allandale, August 31, 1892.

RICHARD K. DORSEY.

In presence of—

H. HAGGARD,

C. N. CREASE.