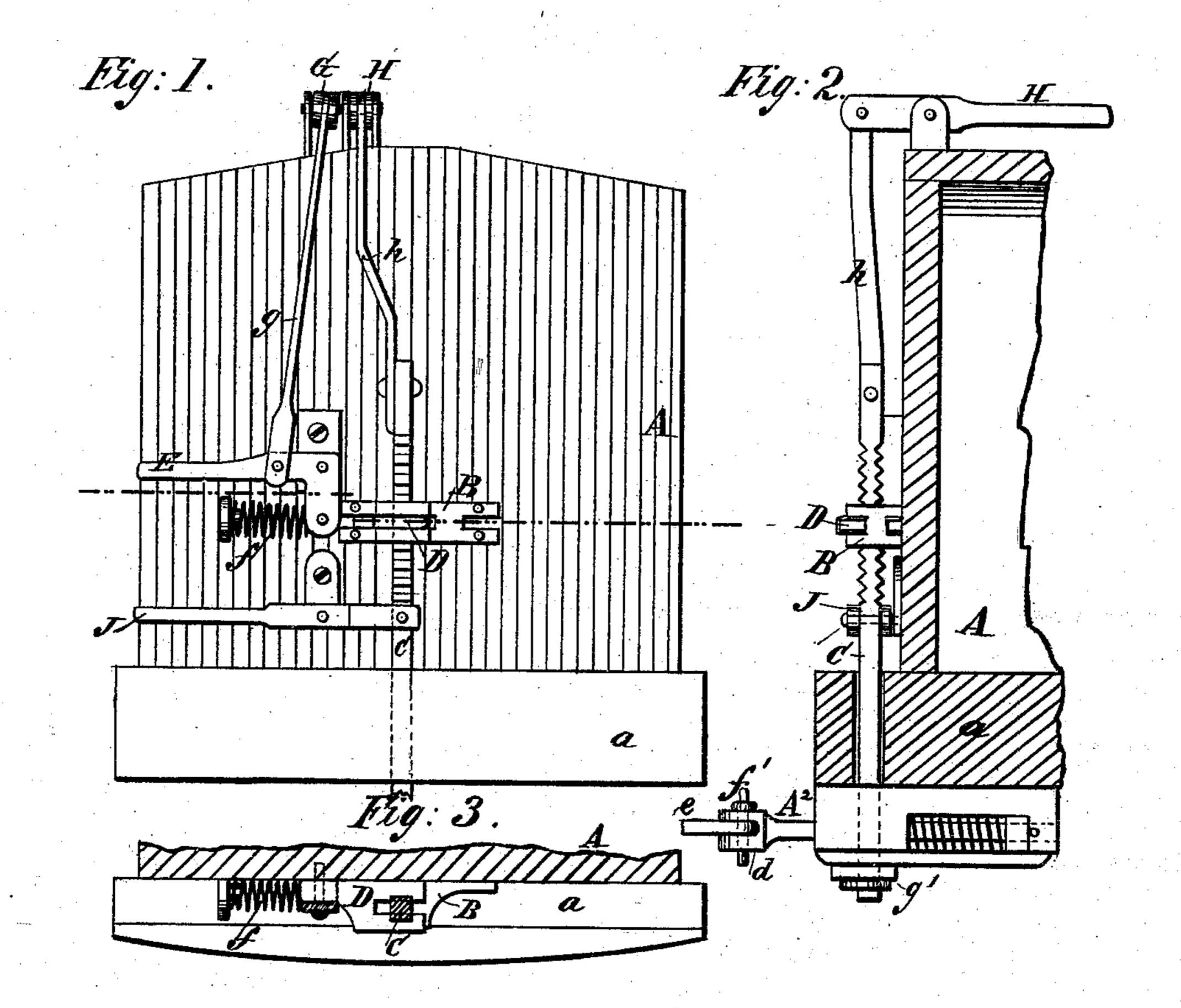
## M. LOGAN. Car-Coupling.

No. 217,124.

Patented July 1, 1879.



WITNESSES:

A: Schehl. b. Sedgwick INVENTOR:
Mo. Logan

RY. M. Logan

ATTORNEVS

## UNITED STATES PATENT OFFICE.

MILTON LOGAN, OF FOXBURG, PENNSYLVANIA.

## IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. 217,124, dated July 1, 1879; application filed September 16, 1878.

To all whom it may concern:

Be it known that I, MILTON LOGAN, of Foxburg, in the county of Clarion, State of Pennsylvania, have invented a new and Improved Car-Coupling, of which the following is a specification.

My invention is an improvement upon Letters Patent granted to me July 30, 1878; and relates to means for operating the hook-ended draw-bars shown in said patent, whereby the cars are uncoupled.

In the accompanying drawings, Figure 1 is an end view of a box-car provided with devices embodying my invention. Fig. 2 is a vertical section of the same. Fig. 3 is a horizontal section of the same.

Referring to the drawings, A represents a box-car provided with draw-bars A2, similar to those shown in aforesaid patent. To the end of the car A is attached a bracket, B, in which works the rod C. This rod is provided with notches on its front and rear sides, for engagement with a forked sliding latch, D, the rear end of which is connected to the short arm of an elbow-lever, E, pivoted to the end of the car, so as to oscillate in a vertical plane, and provided with a spring, f, which has a tendency to keep the latch Dengaged with the rod C. The long arm of the lever E extends longitudinally to about on a line with the side of the car A, so that it may be readily operated from either the platform or from the ground at one side of the car. It is also connected by a rod, g, with the short arm of a lever, G, pivoted on the top of the car, so that it may

be operated from the top. The rod C is connected by a rod, h, with a lever, H, on the top of the car, so that it may be raised and lowered by a person on said top. It is also connected to the short arm of a lever, J, pivoted under the elbow lever E, so that it may be operated from the platfrom or from the ground at one side of the car.

When the rod C is to be raised or lowered the long arm of the lever E is raised, so as to withdraw the latch D from engagement with the notches in the rod C, which is then raised or lowered by means of one of its operating-levers, and when at the desired position the latch D is released, so as to allow it to engage with the notches again and hold the rod securely.

The draw-bars  $A^2$  have hooked or shouldered heads d; and to permit the heads d to be coupled with cars having the common drawhead, I provide a horizontal slot in the heads d, into which the coupling-link e may be inserted, as shown, and held by the pin f', that passes through a vertical hole in head d.

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

The notched rod C, working in bracket B, and the forked sliding latch D, in combination with the elbow-lever E, held by spring f and connected with levers G H J, as described.

MILTON LOGAN.

Witnesses:

J. C. PATTERSON, M. C. CARRINGS.