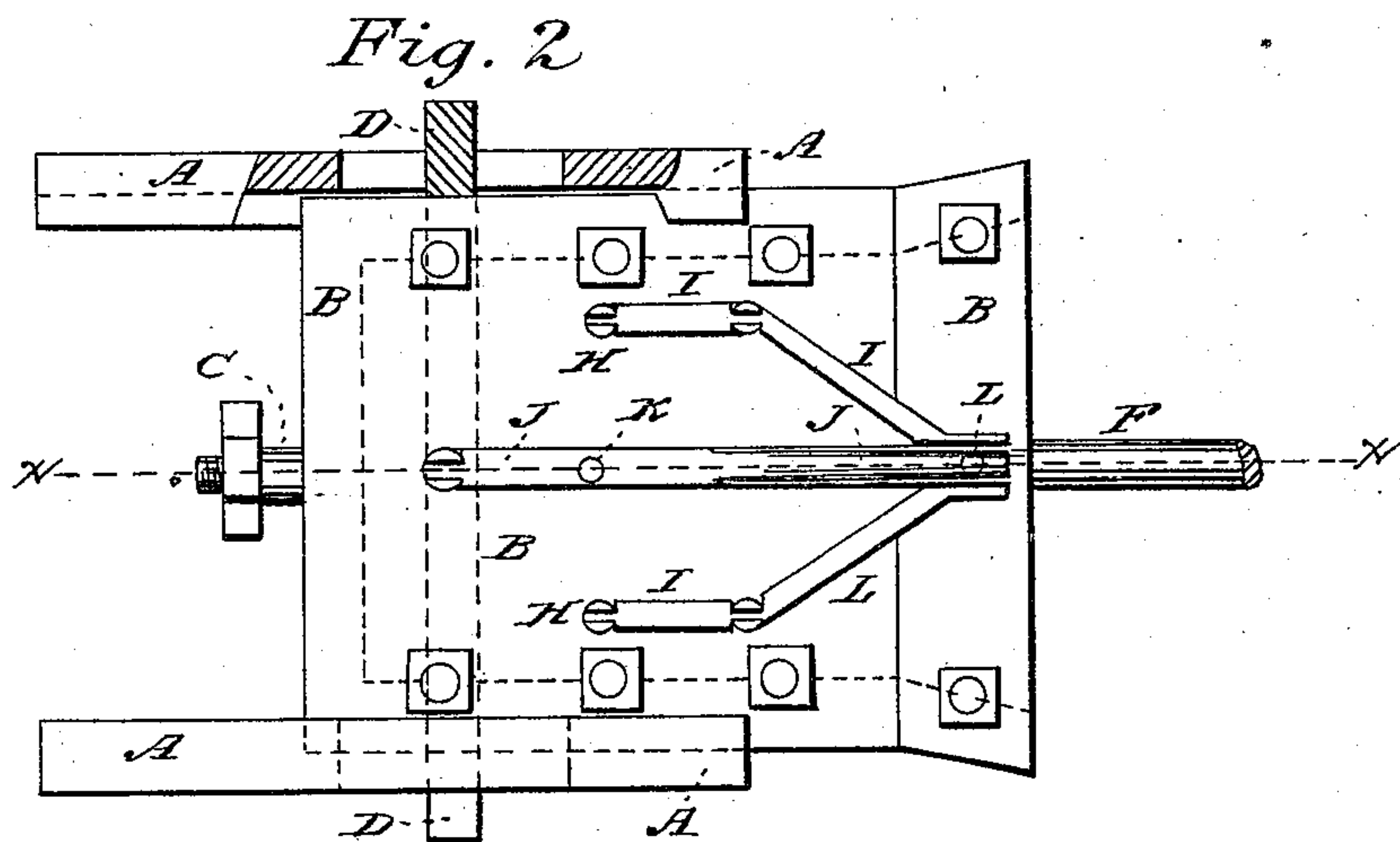
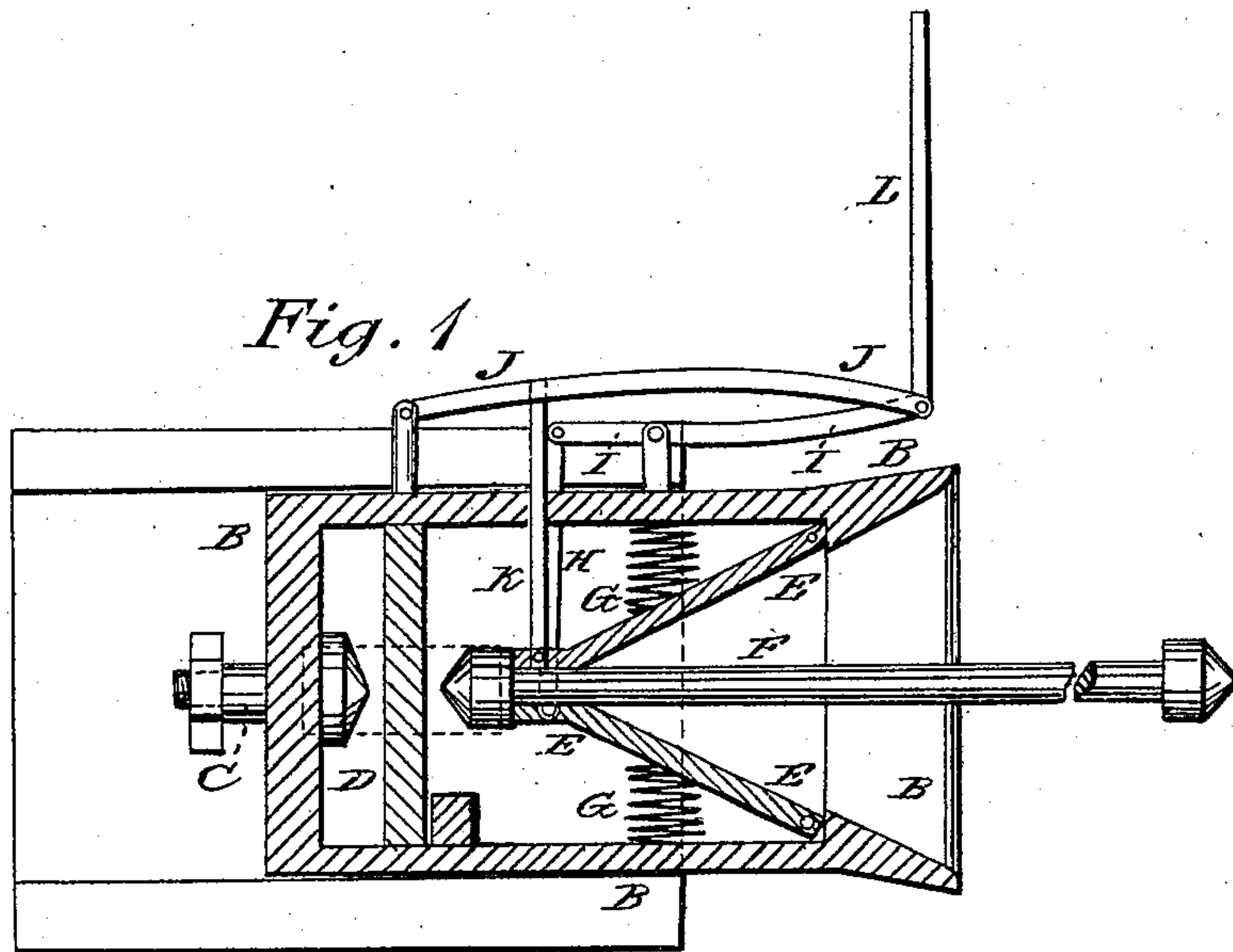


J. A. MORRISON.

Car Coupling.

No. 95,711.

Patented Oct. 12, 1869.



Witnesses:

Geo. W. Mabey  
Jno. D. Brooks

Inventor:

J. A. Morrison  
per *[Signature]*  
Attys

# United States Patent Office.

JAMES A. MORRISON, OF BRADY'S BEND, PENNSYLVANIA.

Letters Patent No. 95,711, dated October 12, 1869.

## IMPROVED RAILWAY-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 I, JAMES A. MORRISON, of Brady's Bend, in the county of Armstrong, and State of Pennsylvania, have invented a new and useful Improvement in Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical longitudinal section of my improved coupling, taken through the line *x x*, fig. 2.

Figure 2 is a top view of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved car-coupling, strong and simple in construction, effective in operation, conveniently operated, and not liable to break or get out of order; and

It consists in the construction and combination of the various parts of the coupling, as hereinafter more fully described.

A are the ways or slides, in which the coupling moves back and forth, and which are securely bolted to some suitable support.

B are the main couplings or bumper-heads, which move back and forth upon the slides A, and to the rear end of which the rear springs are attached by a bolt, C.

The movement of the bumpers B, in the slides A, is limited by the plate or bar D, secured in the rear part of the coupling B, or formed solid therewith, and the ends of which pass through slots in the slides A, as shown in fig. 2.

The mouth of the bumper B is made hopper-shaped, and at the rear of the shoulder, formed at the base of the inclined upper and lower sides of said mouth, are pivoted the forward edges of the plates E, that support the coupling-pin F, and resist the draught-strain.

The inner or rear edges of the plates E rest against the shoulders of the heads of the coupling-pin F, as shown in fig. 1.

The centre of the rear part of the lower plates E is recessed to receive the body of the coupling-pin E, so that said pin may always be at the centre of the coupling.

The plates E are forced against the pin F, to clamp it securely in place, by coiled or other springs G, interposed between the outer sides of said plates and the lower and upper surfaces of the interior or the bumpers B.

To the rear part of the lower plate E are pivoted the lower ends of two rods H, which pass up through the upper part of the bumper B, and the upper ends of which are pivoted to the rear ends of the levers I.

The levers I are pivoted to supports or short standards, attached to the upper part of the bumper B, and their forward ends incline toward each other, and are pivoted to the forward part of the central lever J.

The lever J is pivoted at its rear end to a support or short standard, attached to the upper part of the bumper B, and to it is pivoted the upper end of the rod K, which passes down through the upper part of the bumper B, and its lower end is pivoted to the rear part of the upper plate E, at or near the centre of said rear part.

To the forward end of the central lever J is pivoted the lower end of the rod L, which passes up to the platform or top of the car, so that it may be conveniently reached and operated by the brakeman.

By this construction, by drawing the rod L upward, the plates E will be drawn apart, releasing the coupling-pin F, and uncoupling the cars.

By this construction of the coupling, all the parts that sustain the draught-strain are exposed to a direct straight pull, so that there is no possibility of breaking the coupling without pulling the solid body of metal apart, and at the same time the coupling is simple in construction, and easily and conveniently operated.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The combination of the rods H and K, levers I and J, and rod L, with each other and with the bumper B, pivoted plates E, and springs G, substantially as herein shown and described, and for the purpose set forth.

JAMES A. MORRISON.

Witnesses:

HENRY DYBAL,

EBENEZER CHRISTY.