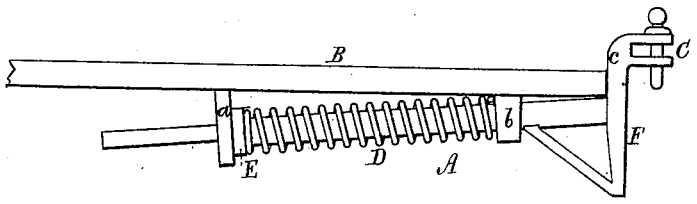
F. F. ADAMS.

Draw-Bar for Street-Cars.

No. 167,968. Patented Sept. 21, 1875.



Witnesses.
S. W. Pipes
L. W. Möller

Franklin F. Adams.
by his attorney.
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UNITED STATES PATENT OFFICE.

FRANKLIN F. ADAMS, OF ERIE, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND ALONZO FARRAR, OF BROOKLINE, MASSACHUSETTS.

IMPROVEMENT IN DRAW-BARS FOR STREET-CARS.

Specification forming part of Letters Patent No. **167,968**, dated September 21, 1875; application filed August 10, 1875.

To all whom it may concern:

Be it known that I, FRANKLIN F. ADAMS, of the city and county of Erie, of the State of Pennsylvania, have invented a new and useful Improvement in Draw-Bars for Horse-Railway Carriages; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawing, which is a side view of a draw-bar with my improvement.

In carrying out my invention I construct the draw-bar with an abutment projecting from it below its couplings, such abutment being to sustain the draft-pole, from which an arm projects, and bears against the said abutment.

In the drawings, A denotes the draw-bar, as applied to the platform B of a horse-railway carriage, so as to slide freely longitudinally in boxes or projections, *a b*. This draw-bar at its front end terminates in or is furnished with a coupling, C, as shown, and between the two projections *a b* there encompasses the draw-bar a helical spring, D, which bears at its front against the box *b*, and at its rear end against a collar, E, fastened in the draw-bar. The coupling C projects upward, and in other respects, as shown, from the bar, so as to form a shoulder, *c*, to estop the rearward movement of the bar. Projecting down from the bar, and arranged with respect to the coupling C, in manner as shown, is the abutment F, which moves with the coupling and bar, and with the former aids in supporting the pole when coupled to the draw-bar. The bar A, the coupling, and spring are to relieve the draft animals from sudden strain in starting the carriage. They also operate to prevent the carriage and its load from being suddenly started forward, it being well known that by reason of such sudden movement persons standing in the car or on its platform are liable to be thrown down or lose their balance. The abutment F, by moving with the coupling, keeps the pole always at its proper angle of elevation, and allows it to turn either to one side or the other as circumstances may require.

I do not claim such an abutment rigidly applied to the platform of a horse-railway car, and used with a coupling also rigidly fixed thereto. By having the coupling and abutment applied to a movable bar supported by a spring, as set forth, they can move forward or backward with the pole and the bar.

I claim—

1. The combination of coupling-clip C having abutment F, bar A, and spring D, substantially as and for the purpose set forth.

2. The combination of car-platform B, spring D, bar A, and coupling C having stop *c*, and abutment F, all substantially as and for the purpose set forth.

FRANKLIN F. ADAMS.

Witnesses:

R. H. EDDY,

J. R. SNOW.