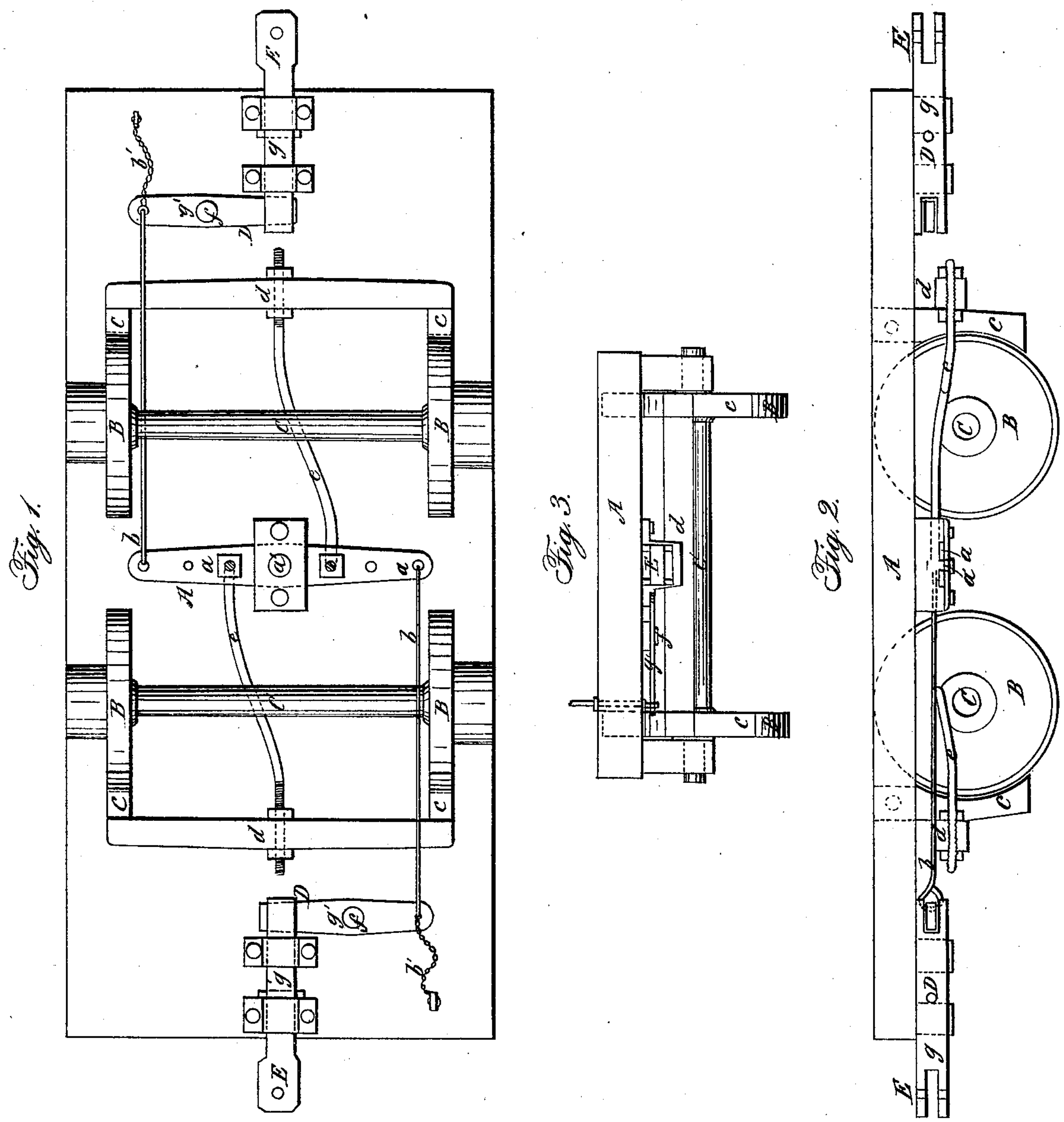
D. T. ROBINSON.

Car Brake.

No. 53,544. Patented Mar. 27, 1866.



Witnesses:

Inventor:

Daniel T Robinson

UNITED STATES PATENT OFFICE.

DANIEL T. ROBINSON, OF BOSTON, ASSIGNOR TO HIMSELF AND LORIN L. FULLER, OF MALDEN, MASSACHUSETTS.

IMPROVED CAR-BRAKE.

Specification forming part of Letters Patent No. **53,544**, dated March 27, 1866.

To all whom it may concern:

Be it known that I, DANIEL T. ROBINSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Brake Mechanism for Railway-Carriages; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, of which—

Figure 1 is an under-side view of a railway-car platform containing my invention. Fig. 2 is a longitudinal section of the same, and Fig. 3 an end elevation of it.

My invention consists in the application to an ordinary brake mechanism of a right-angular lever, by means of which pressure is applied to the brakes by the stopping of the draft-animals connected to a car, if on a horse-railway track, or of the locomotive if on a steam-railway track, as well as by the concussion caused by the approach together of meeting of two carriages in a train of two or more.

In the drawings above mentioned, A denotes the platform of a railway-carriage; B B B B, the wheels, and C C the axles, they being applied in usual manner. *a* is a lever turning at its center upon a fulcrum, *a'*, extended downward from the under side of the platform A of the carriage, and having rods *b b* secured to each extremity of it, as shown in Fig. 1 of the drawings, the said rods being connected to the usual windlass now generally employed by a rope or chain, *b'*. *c c* are the brake-heads, and *d d* the rods or bars connecting them together, these bars being connected with the lever *a* by rods *e e*, which are linked to it about midway between its center and the rods *b b*, though this position may be varied as circumstances may require.

The above-described brake mechanism, with the exception of an additional rope or chain *b'*, constitutes the subject of a former patent.

My invention consists simply in attaching to the platform A, by a pin or fulcrum, *f*, a right-angular lever, D, composed of two arms, *g g'*. To one of these arms—viz., *g*—a bunter-bar, E, is secured, while the other arm—viz., *g'*—is connected with the rod *b*, as seen in Fig. 1.

It will readily be seen that pressure applied to the bunter-bar E will cause the lever D to turn upon its fulcrum, and by means of the arm *g'* and connecting-rod *b* so actuate the lever *a* as to press the brake-heads against the wheels of the carriage and stop its motion.

It will also be seen that by means of the secondary rope or chain *b'*, the ordinary hand-windlass may be used to stop the motion of the car independent of my invention, or either of them may be used without interfering with the other, provided both are attached to the same carriage.

The auxiliary rope or chain *b'* may be attached directly to the arm *g'* of the lever D, instead of to the rod *b*, if desirable.

Whenever it may be desirable to "back" a car a pin may be passed down through the platform A and the lever D, which prevent the brake-heads from being forced against the wheels.

The drawings represent the lever D as made in two parts, or with the arm *g* sliding in boxes *a'*, and the arm *g'* working within a slot formed in the end of the arm *g*.

I claim—

1. The application and arrangement of the lever D or its equivalent device, substantially in manner and to operate as above described.

2. In combination with said lever, the employment of the auxiliary rope or chain *b'*, essentially in manner and to operate as hereinbefore set forth.

DANIEL T. ROBINSON.

Witnesses:

S. S. FULLER,

CHAS. EDWD. PARKER.