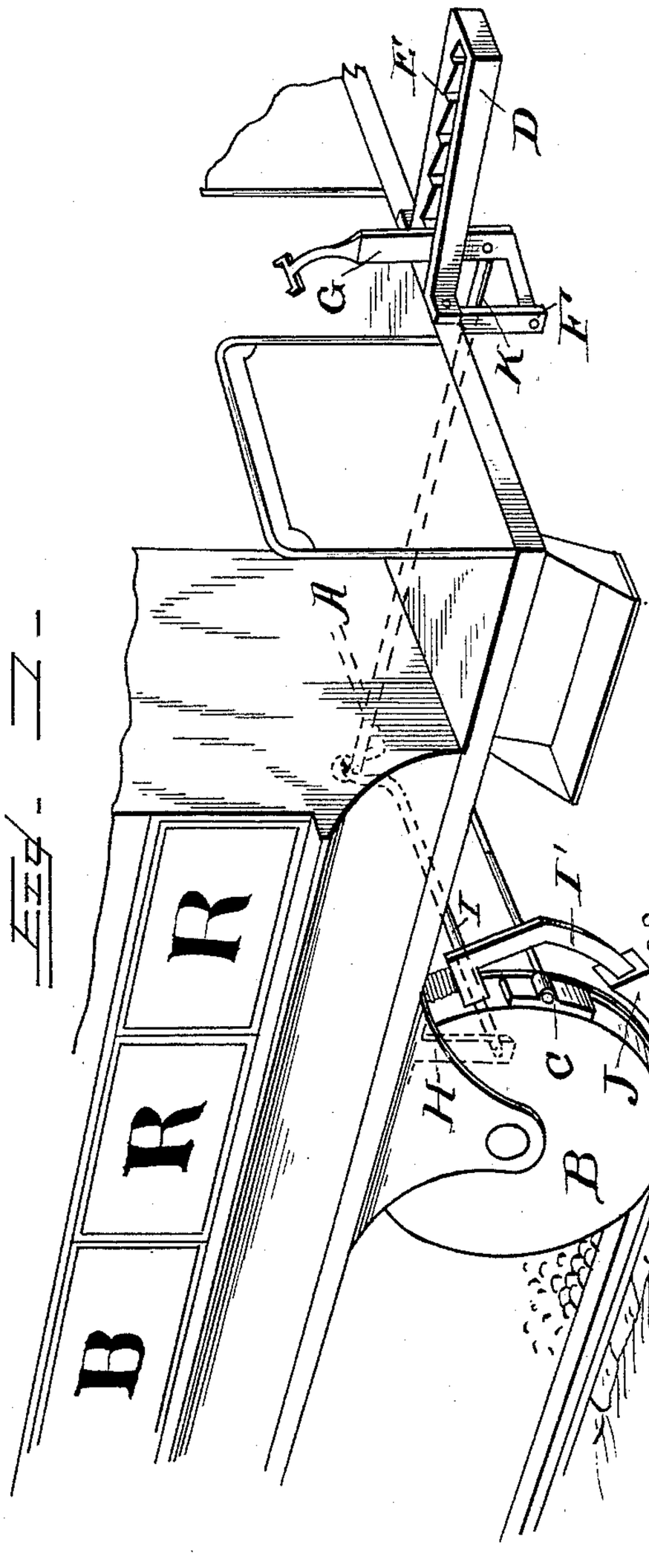
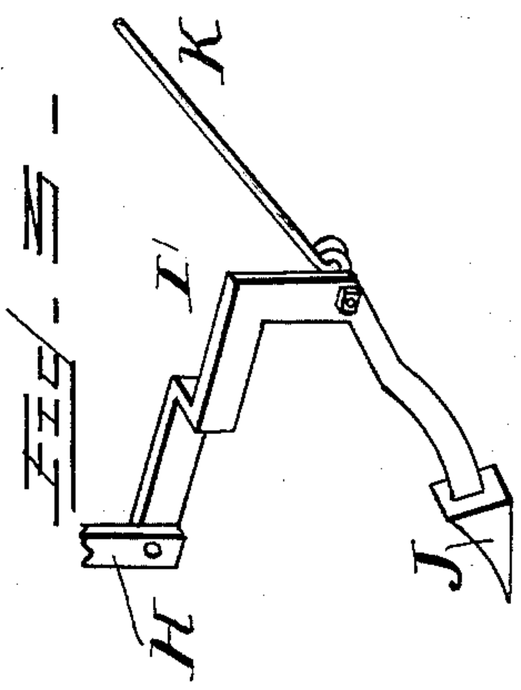
(No Model.) 2 Sheets—Sheet 1.

F. FELDHAUS.

CAR BRAKE.

No. 432,129. Patented July 15, 1890.





WITNESSES

A. J. Schwartz

J. F. Reily.

Frederick Feldhaus

INVENTOR

By W. FitzGerald

Attorney

(No Model.)

2 Sheets—Sheet 2.

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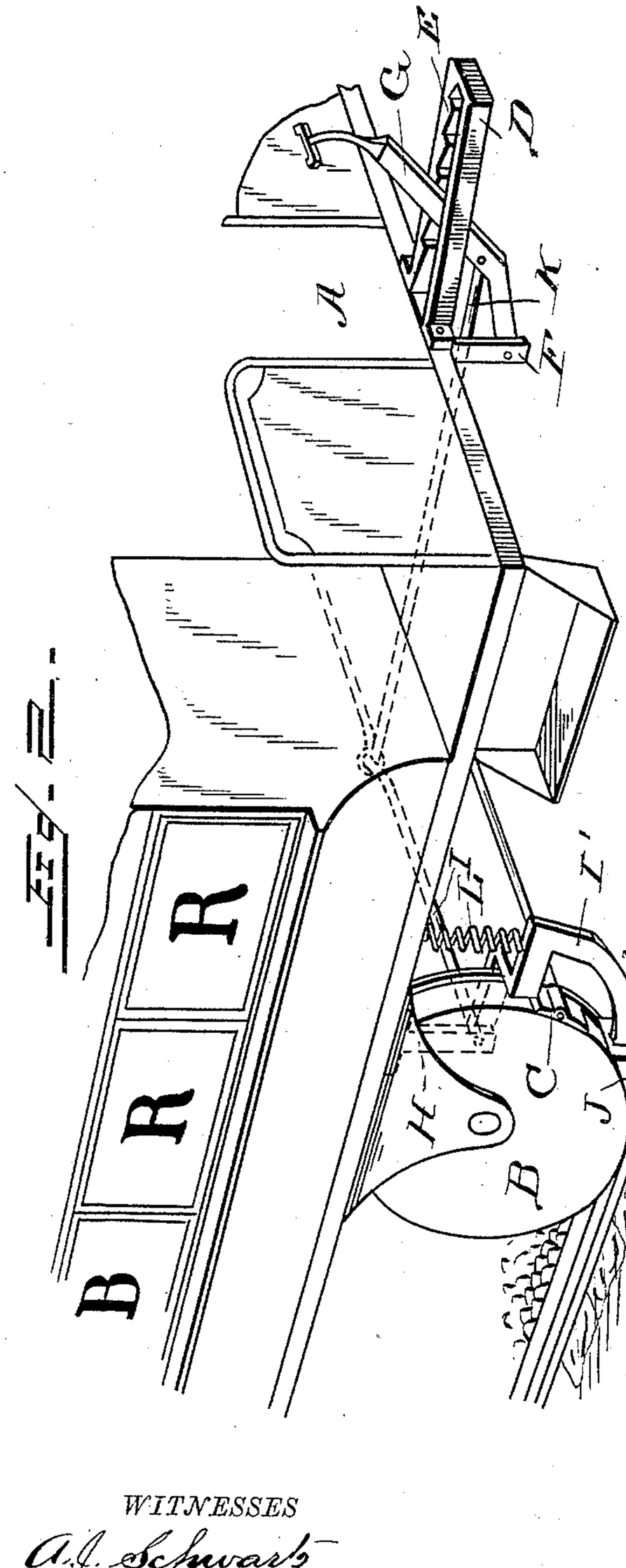

Fig. 2.

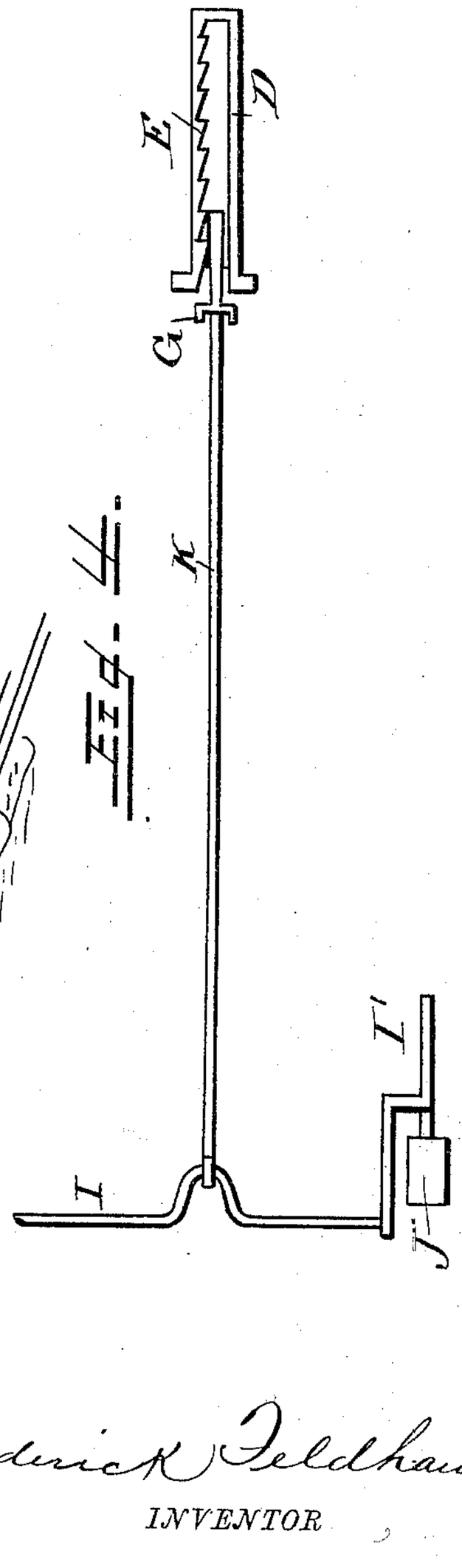

Fig. 4.

WITNESSES

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UNITED STATES PATENT OFFICE.

FRED FELDHAUS, OF CINCINNATI, OHIO.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 432,129, dated July 15, 1890.

Application filed April 5, 1890. Serial No. 346,644. (No model.)

To all whom it may concern:

Be it known that I, FRED FELDHAUS, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Car-Brakes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improved car-brake, and is intended especially to prevent backward movement of cable-cars when they have been stopped on an upgrade.

The invention consists in an attachment or supplemental check-block adapted to be used upon the rear wheels in addition to the ordinary brake-shoes, as will be hereinafter set forth.

In the accompanying drawings, Figure 1 is a perspective view of the rear end of a car with my improved attachment applied thereto. Fig. 2 is a similar view showing the attachment as it appears when in use. Fig. 3 is a detail view of a portion of the attachment removed, and Fig. 4 is a detail view.

The car A is of the usual or any preferred construction, and is provided with the ordinary carrying-wheels B and brakes C, as clearly shown. On the rear side of the rear platform I provide the horizontal bail or strap D, which is provided with a series of projections or teeth E on its inner side, and to the under side of the platform I secure a bracket F. A lever G is pivoted at its lower end to the lower end of the said bracket and extends up through the bail or strap D, as clearly shown. On the under side of the car, at or near the side edges of the same, I secure the depending brackets H, in which a crank-shaft I is journaled, said shaft having the substantially semicircular arms I′ extending rearward and downward from its ends. To the ends of these arms I′, I secure the blocks J, which are wedge-shaped and are adapted to rest upon the track-rails in rear of and adjacent to the rear car-wheels. A pitman or connecting-rod K has its front end pivoted to the lever G and its rear end connected to the crank-shaft I, and a spring L is arranged between the said crank-shaft and the bottom of the car, so as to hold the said shaft normally drawn forward, thus raising the blocks J from the rails, as clearly shown in Fig. 1.

The construction and arrangement of the several parts of my device being thus made known, the operation and advantages of the same will, it is thought, be readily understood. When the car is in motion, the check-blocks J are held up from the track-rails by the action of the spring L, as above stated, and as will be readily understood upon reference to the drawings. When the car stops, the brake is applied in the usual manner, and the conductor presses the lever G rearward, thereby throwing the check-blocks J down upon the track-rails and against the car-wheels, as shown in Fig. 2. When the several parts are thus arranged, if the car-wheels should slip under the brake-shoes and the car tend to move backward, owing to the grade upon which it is stopped, the rear wheels will be made to rise slightly by the check-blocks, and the said blocks will thus be firmly wedged between the track and the wheels, so that the car will be effectually held at the point where it is stopped, the teeth or projections E preventing the lever prematurely springing forward, so that the checking action of the blocks is assured.

My improved device is very simple in its construction, and can be manufactured and applied to a car at a small cost.

The several parts of the device are all beneath the car, so that they are out of the way, and the device operates positively and rapidly, so that the danger of the car running away is obviated.

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

A car-brake consisting of the crank-shaft I, mounted on the under side of the car, the spring L, secured to the said shaft and the car, the check-blocks J, carried by the said shaft, the bail or strap D on the car-platform having the teeth or projections E, the lever G, playing in said bail, and the pitman K, connecting the said lever with the crank-shaft, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FRED FELDHAUS.

Witnesses:
DAVID BOSS,
W. T. PORTER.