

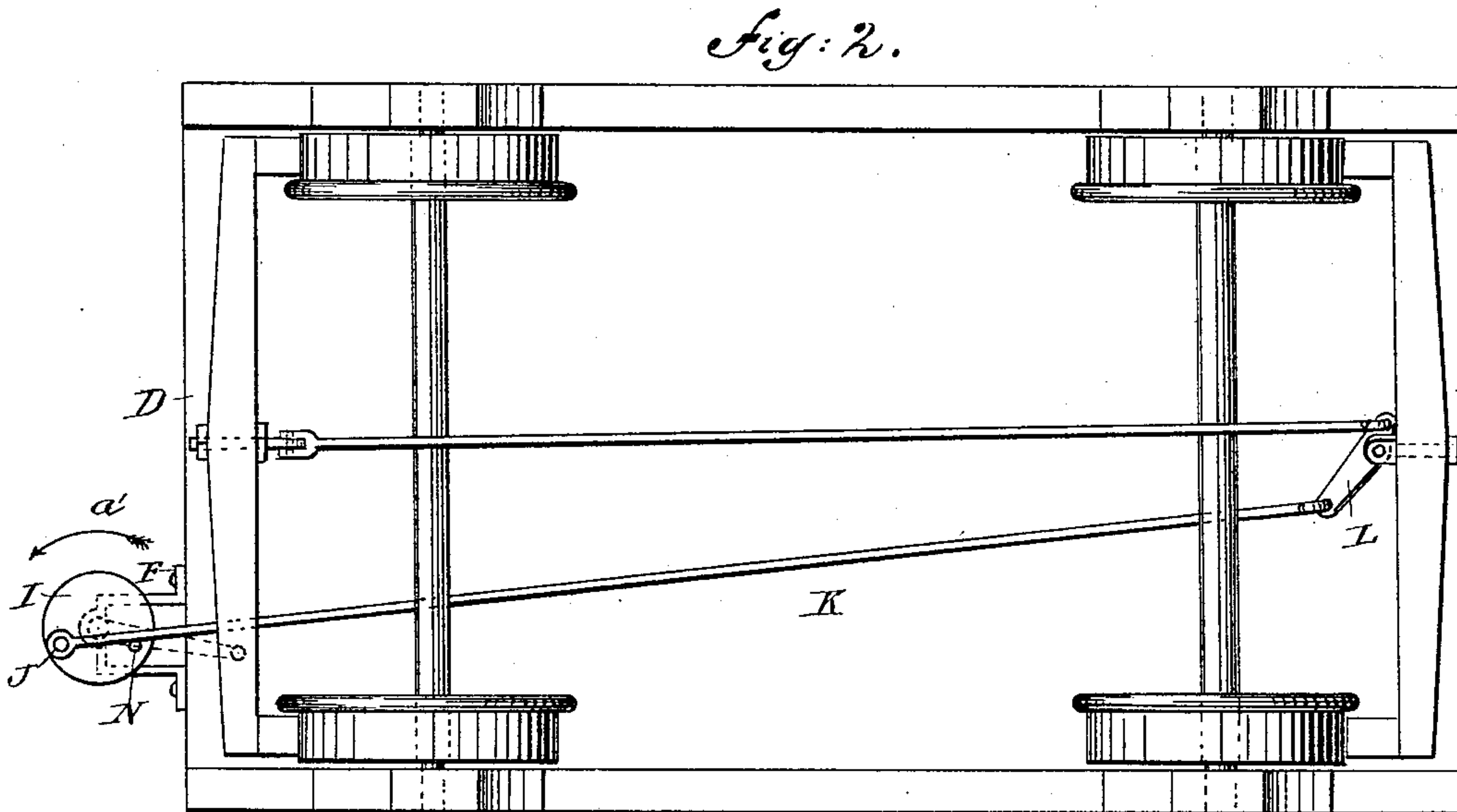
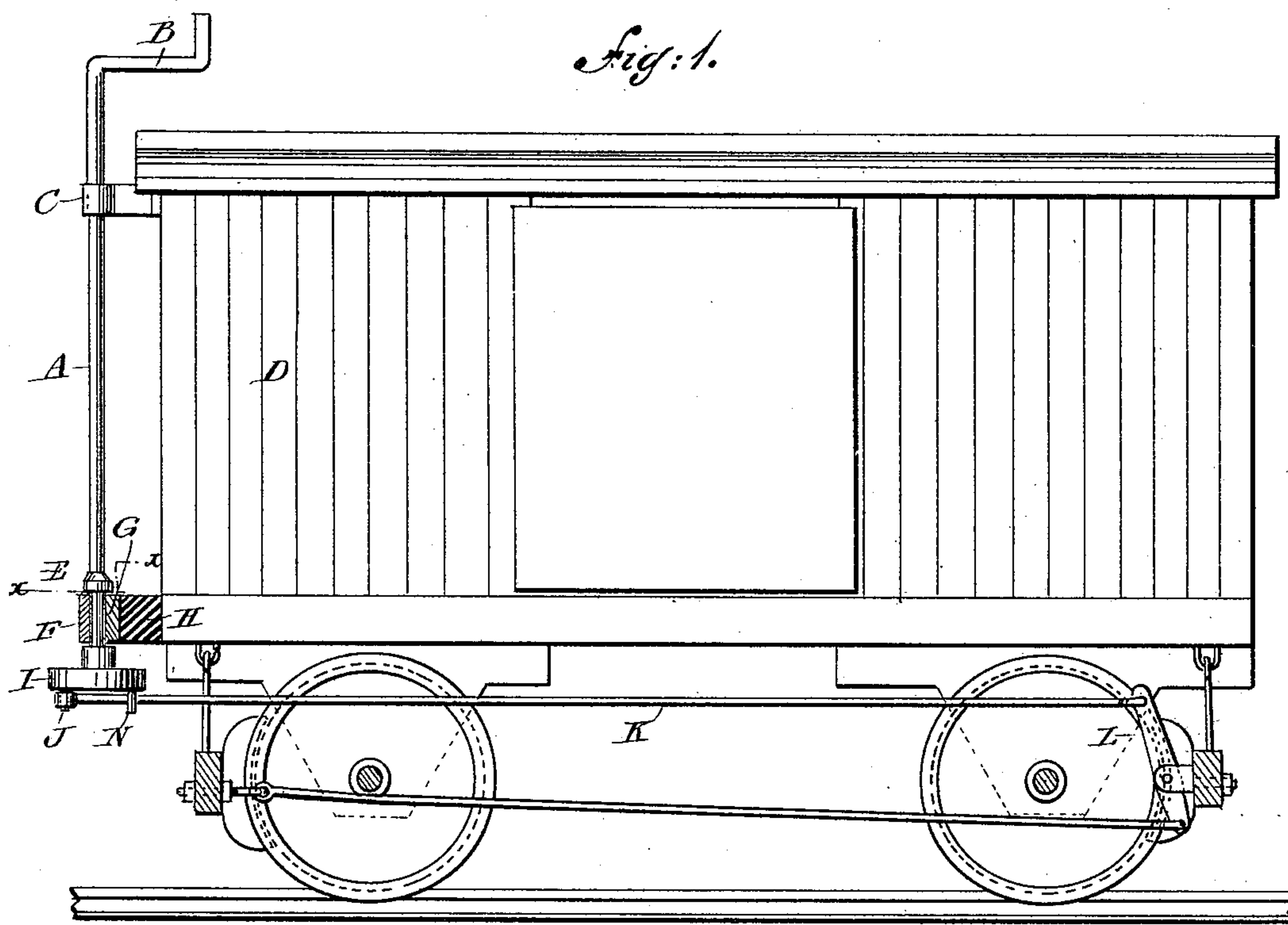
(No Model.)

R. H. DEMENT.

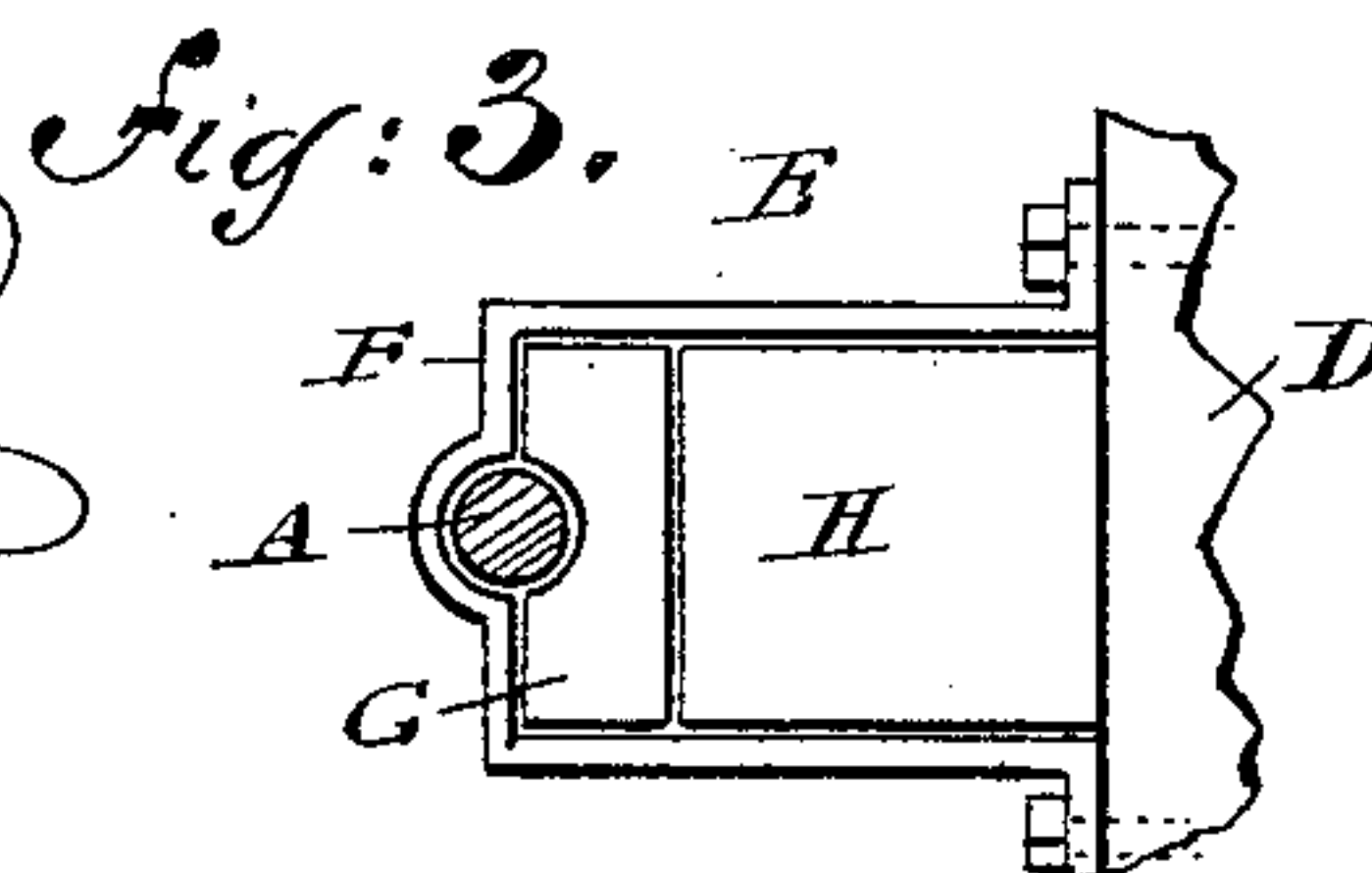
CAR BRAKE.

No. 366,818.

Patented July 19, 1887.



WITNESSES:
Chas. Nida
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INVENTOR:
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UNITED STATES PATENT OFFICE.

ROBERT HENERY DEMENT, OF HUDSON, ILLINOIS.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 366,818, dated July 19, 1887.

Application filed June 4, 1887. Serial No. 240,266. (No model.)

To all whom it may concern:

Be it known that I, ROBERT HENERY DEMENT, of Hudson, in the county of McLean and State of Illinois, have invented a new and Improved Car-Brake, of which the following is full, clear, and exact description.

The object of my invention is to provide a new and improved car-brake in which the brake-staff is given only one-half of a revolution, and is then automatically held in place.

The invention consists of a crank-disk secured to the lower end of a brake-staff and connected with the brake-lever rod, of a spring pressing against the lower end of the brake-staff, and of a stop-pin secured to the crank-disk to limit the motion of the latter.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improvement attached to a railroad-car. Fig. 2 is a bottom view of the same, and Fig. 3 is an enlarged sectional plan view of the same on the line *x x* of Fig. 1.

My improved car-brake is provided with the brake-staff A, carrying on its upper end the crank-handle B, or a hand-wheel, by which said brake-staff A is turned and the brake is applied or released. The upper end of the brake-staff A is mounted to rotate in a bearing, C, secured to the car D. The lower end of the brake-staff A is held in a bearing, E, made in two parts and consisting of the bracket F, secured to the car D, and the block G, held to slide in said bracket F. Against the inner side of the latter presses a spring, H, preferably of rubber or other elastic material, and placed in the bracket F, resting with its inner end against the car D.

On the extreme lower end of the brake-staff A is secured a crank-disk, I, provided with a crank-pin, J, pivotally connected with the brake-lever rod K, connected with the brake-lever L, connected in the usual manner with the brake mechanism of any approved construction. On the under side of the crank-

disk I is also secured the stop-pin N, placed opposite the crank-pin J, but not in the diametric line therewith.

The operation is as follows: When the brake mechanism is disengaged, the crank-pin J stands inward near the car D, while the stop-pin N stands outward. When the operator desires to apply the brake, he turns the crank-arm B, or the hand-wheel, so that the staff A turns, whereby the crank-disk I makes one-half of a revolution, so that its crank-pin J moves the brake-lever rod K forward, and thus applies the brake. The operator can turn the brake-staff A in the direction of the arrow *a'* until the pin comes in contact with the brake-lever rod K, and thus prevents a further turning of said staff A in the direction of the arrow *a'*. The crank-pin J now stands slightly beyond the center line of the crank-disk I. It will be seen that by imparting this rotary motion to the crank-disk I and moving the rod K forward the latter exerts a rearward pressure against the lower end of the brake-staff A, so that the latter presses its block G against the spring H, which spring is thus partly compressed and exerts a pressure against the brake-staff in a forward direction, and thus the disk I and the brake-staff A are held in a locked position as soon as the crank-pin J and the pin N assume the positions above described, and shown in Figs. 1 and 2. When the operator desires to release the brakes, he turns the crank-arm B, or the hand-wheel, in an opposite direction, so that the crank-pin J passes backward over the center line, thus overcoming the pressure of the compressed spring H, which, on this return movement of the disk I, presses the block G forward and the brake-staff to its original position.

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

1. In a car-brake, the combination, with a brake-staff, of a crank-disk secured to the lower end of said brake-staff and connected by its crank-pin with the brake-lever rod, a stop-pin secured to said crank-disk to limit the movement of the latter, and a spring pressing against the lower end of said brake-staff, substantially as shown and described.

2. In a car-brake, the combination, with a

brake-staff, of a bearing in two parts, of which
one part slides on the other, and in which bear-
ing the lower end of said brake-staff is mounted,
a spring pressing against the sliding part of
5 said bearing, a crank - disk mounted on the
lower end of said staff and connected by its
crank-pin with the brake-lever rod, and a stop-

pin secured to said crank-disk to limit the
revolving motion of said crank-disk, substan-
tially as shown and described.

ROBERT HENRY DEMENT.

Witnesses:

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