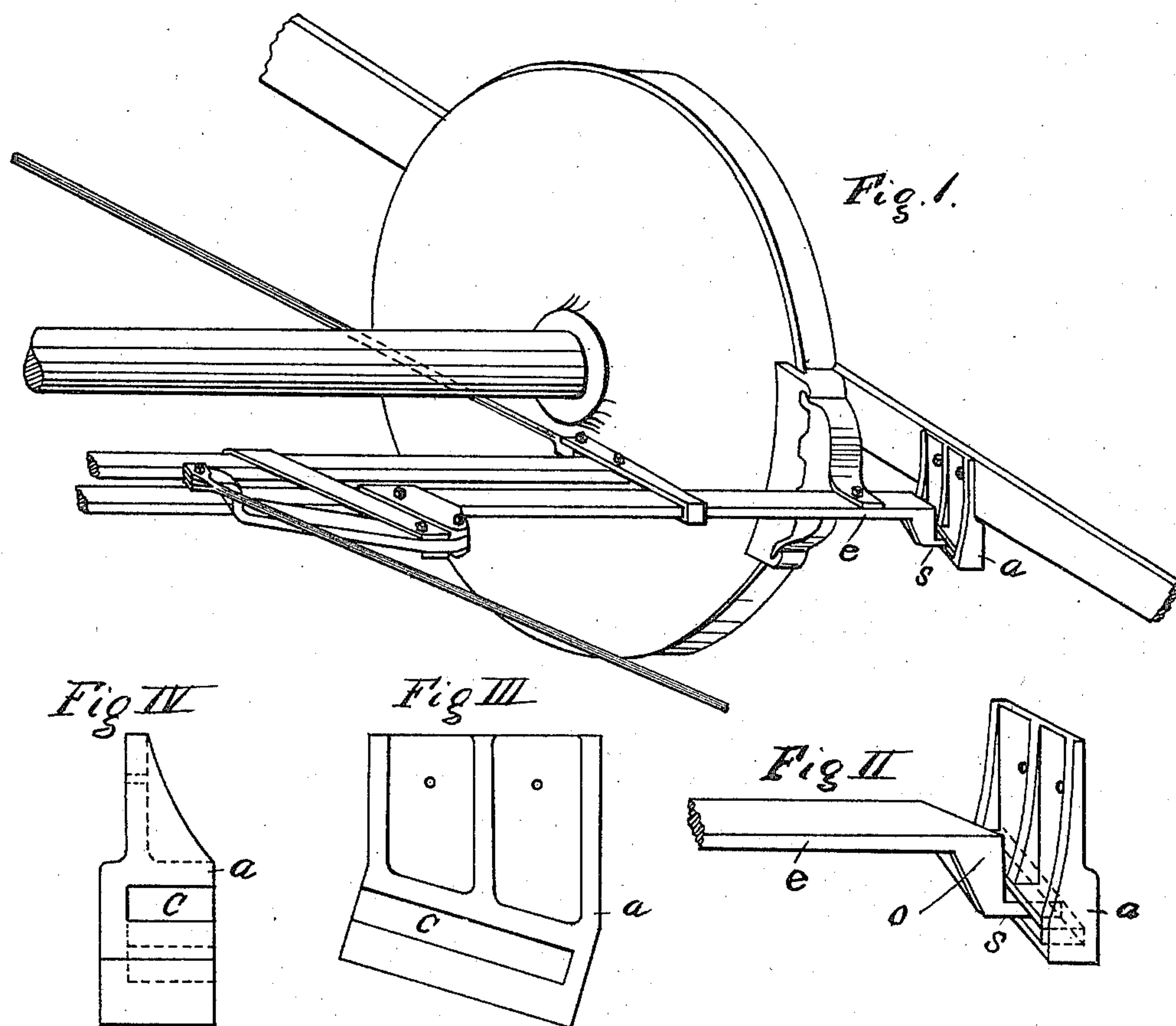


(No Model.)

T. MILLEN.
CAR BRAKE.

No. 573,024.

Patented Dec. 15, 1896.



WITNESSES:

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THOMAS MILLEN, OF NEW YORK, N. Y.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 573,024, dated December 15, 1896.

Application filed September 16, 1896. Serial No. 606,015. (No model.)

To all whom it may concern:

Be it known that I, THOMAS MILLEN, of the city, county, and State of New York, have invented a new and useful Improvement in Car-
5 Brakes, of which the following is a specification.

This invention relates to car-brakes, its object being to provide a brake that will of its own weight and gravitation recede from its
10 contact with the wheels without the use or aid of springs or assisting contrivances.

In the accompanying drawings, which form a part of this specification, my invention is fully illustrated, with similar letters of reference to indicate corresponding parts, as follows:
15

Figure 1 is a perspective view showing one car-wheel and one brake-shoe with the inclined slotted guide-clamp *a* in place on the
20 inside of the truck-frame, also the end of the brake-beam as it rests therein. Fig. 2 is an enlarged perspective view of the clamp *a* and the end of the brake-beam in position. Fig. 3 is a face view of the clamp *a*, showing the
25 inclined slot *c*, in which the end of the brake-beam is adjusted, as shown in Fig. 2. Fig. 4 is a side elevation of the clamp *a*, showing the preferable form of construction.

Heretofore it has been the custom to employ retractile springs secured to the brake
30 (by which I mean the beam *e* and shoe *n*) for the purpose of drawing the latter away from the contact with the wheels after the brake power is released. It is true that the "hangers"
35 are often used and so arranged that the beam will drop back of its own weight; but such brakes can only be used with one direction of wheel rotation—*i. e.*, that portion of the wheel which is in contact with the shoe must
40 be traveling downward, so that the strain will be brought downward on the hangers. This form is also objectionable, as the mechanism is always loose and rattling and very seldom, if ever, sets the shoe squarely against the
45 wheel. In the more improved pattern, however, the ends of the brake-beams slide in grooves provided in the side pieces of the truck-frame, springs being employed to draw the brake-beam away from the wheels, as
50 above described.

In the construction which embodies my in-

vention inclined grooves, as *c*, are formed in the side pieces of the truck-frame. The brake-beam may be simply a straight rod or may be provided with angular projections, 55 as *O*, at each of its ends, the said projections, as shown, being preferably made integral with the brake-beam. In either case the end of the brake-beam itself or the end of its projection where the same is employed is beveled, 60 as at *s*, and rests somewhat loosely within the slot, so that when the brake power is released the weight of the brake beam, shoes, and attached parts will cause the beam to slide back in the slot and thus free the truck. 65

The form of construction which I have adopted is simply a cast-iron cleat *a*, which is securely bolted to the side pieces of the truck-frame. It will be seen by this construction that the brake-beam will of its own 70 weight slide to the back and lower portion of the slots *c*, that when the braking power is applied the beam will have to slide upward and forward to bring the shoes in contact with the wheels, and that when the power is 75 released the brake-beam with the shoes will fall backward and downward away from the wheels. It will also be seen that the ends of the brake-beam being secured against the action of an upwardly or downwardly operating 80 force the brake is equally useful in either direction of wheel rotation.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is— 85

1. In a self-receding braking device, a brake-beam, and guide-brackets having inclined slots for the reception of the ends of the brake-beam, substantially as described.

2. In a self-receding braking device, the 90 combination with the brake-beam and brake-shoes, of a member having inclined slots for the reception of the ends of said brake-beam, substantially as described.

3. In a self-receding braking device, the 95 combination with the brake-beam having angular projections at each of its ends, and brake-shoes carried by said brake-beam, of brackets having inclined slots for the reception of the projections on said brake-beam, 100 substantially as described.

4. In a self-receding braking device, the

combination with the truck-frame, of a brake-beam carried thereby, brake-shoes secured to the beam, and brackets mounted on the truck-frame and having inclined slots for the reception of the ends of the brake-beam, substantially as described.

In testimony that I claim the foregoing im-

provement in car-brakes as above described I have hereunto set my hand this 15th day of September, 1896.

THOMAS MILLEN.

Witnesses:

CHARLES L. MALCOLM,
C. D. MCGIEHAN.