

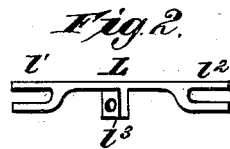
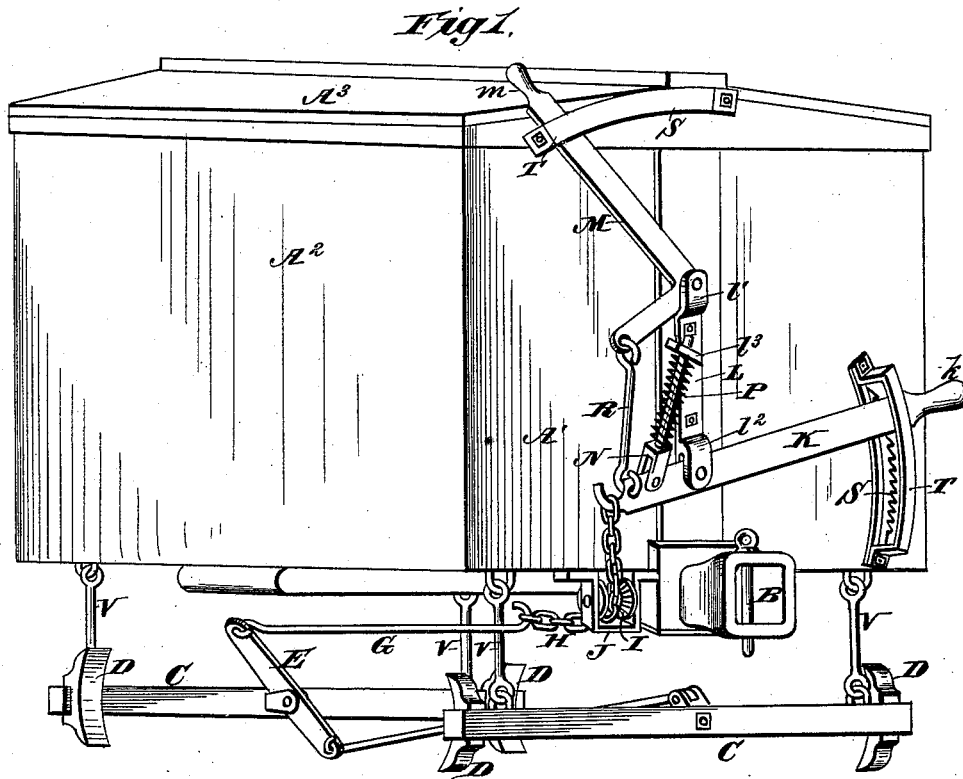
(No Model.)

J. W. STARK.

CAR BRAKE.

No. 343,502.

Patented June 8, 1886.



Witnesses.
Robert Everett,
Vinton Doombs

Inventor.
John W. Stark,
By
James L. Norris,
Atty.

UNITED STATES PATENT OFFICE.

JOHN W. STARK, OF TOLEDO, OHIO.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 343,502, dated June 8, 1886.

Application filed October 20, 1885. Serial No. 180,558. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. STARK, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have
5 invented new and useful Improvements in Railroad-Car Brakes, of which the following is a specification.

My invention relates to certain new and useful improvements in railway-car brakes; and
10 it has for its object to provide a car-brake that shall be of simple and inexpensive construction, and that may be operated either from the top of the car or from the ground; and to this end my invention consists in the novel construction and arrangement of parts shown in
15 the drawings, and fully described in the specification, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a
20 perspective view of one end of a car with my improved brake mechanism applied thereto, the trucks and wheels being removed to more clearly exhibit the construction and arrangement of parts. Fig. 2 is a detail of one of the
25 parts.

The letter A indicates the car, and B the draw-head.

C C indicate brake-beams, suspended from the bottom of the car by means of swinging
30 rods V V. To the rear brake-beam is pivoted the lever E, connected at its lower end with the rod F, pivoted to the front brake-beam, and connected at its upper extremity with a brake-rod, G, which in turn is suitably connected
35 with the mechanism for operating the brakes. All of the above parts are of ordinary and well-known construction, and need not be further described.

The letter L indicates a hanger having bifurcated ends l' l'' , and provided at about its center with a slotted lug, l^3 . This hanger is secured at about the center of the end of the car by bolts, as shown. In the upper bifurcated end of the hanger L is pivoted a bell-crank lever, M, the upper end of which terminates in
45 a handle, m , and is guided in its movement by a guard, T, said guard T being provided with a rack, S, for the purpose of holding the lever in a fixed position, as will more fully herein-
50 after appear. In the lower bifurcated end of the hanger L is pivoted a lever, K, its outer end terminating in a handle, k , and guided in

its movement and held in position by a guard, T, and rack S, similar to that applied to the bell-crank lever M. The inner end of the lever K terminates in a hook, which engages with
55 one end of a chain, H, said chain passing around a pulley, I, suitably secured to the bottom of the car, and connected at its other end to the brake-lever G, before described. 60

In order that the brakes may be applied either from the side of the car or from the top of the same, I connect the inner ends of the levers K and M by a rod, R, as shown, whereby the brakes may be applied by operating either
65 of said levers. N indicates a bolt bifurcated at its lower end, and straddling the inner end of the lever K, to which it is pivoted, its upper end passing through the slotted lug l^3 on the hanger L. Encircling said bolt N, and con-
70 fined between the bifurcated end thereof and the lug l^3 , is a spiral spring, P, which exerts a pressure upon the inner end of the lever K in a downward direction, thus throwing said end of the lever down, and immediately releasing
75 the brakes when either of the levers K or M are thrown out of engagement with their respective racks S.

In order to adjust the brakes relatively to the levers for applying the same, it is only necessary to shorten or lengthen the chain H,
80 which can be easily and quickly accomplished by changing the engagement of the hooked end of the lever K from one to another of the links of the chain, as will be readily understood; or
85 the engagement of the hooked end of the rod G may likewise be altered or changed.

Having thus described my invention, what I claim is—

1. The combination, with the lever K, pivoted
90 to the hanger L and engaging with the chain H, connected to the brake-rod G, of the bolt N, pivoted to the lever K and passing through the slotted lug l^3 on the hanger L, said bolt being provided with a spring exerting a down-
95 ward pressure to release the brakes, substantially as shown and described.

2. The combination, with the lever K, pivoted to the hanger L and engaging with chain H, connected to the brake-lever G, of the bell-
100 crank lever M, pivoted to the hanger L and connected to the lever K by the rod R, substantially as described.

3. The combination of the lever K, pivoted

to the hanger L and engaging with the chain H, connected to the brake-rod G, the bolt N, pivoted to the lever K and passing through the slotted lug *t* on the hanger L, said bolt
5 being provided with a spring exerting a downward pressure on the lever K, and the bell-crank lever M, pivoted to the hanger L and connected to the lever K by the rod R, all arranged and operating substantially as shown
10 and described.

4. The combination of the lever K, pivoted to the hanger L and engaging with the chain H, passing around the pulley I, secured to the bottom of the car and connected to the brake-rod G, the bolt N, pivoted to the lever K and
15 passing through the slotted lug *t* on the hanger

L, said bolt being provided with a spring exerting a downward pressure on the lever K, and the bell-crank lever M, pivoted to the hanger L and connected to the lever K by the rod R, 20 the said levers K and M engaging at their outer ends with racks S and guards T, all constructed and arranged substantially in the manner shown and described, and for the purpose specified. 25

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN W. STARK.

Witnesses:

JOSEPH N. CLOUSE,
WILLIAM H. TUCKER.