

(No Model.)

E. VERSTRAETE.
ELECTRIC RAILWAY BRAKE.

No. 467,259.

Patented Jan. 19, 1892.

Fig. II

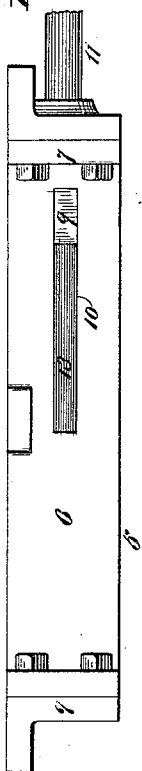


Fig. I

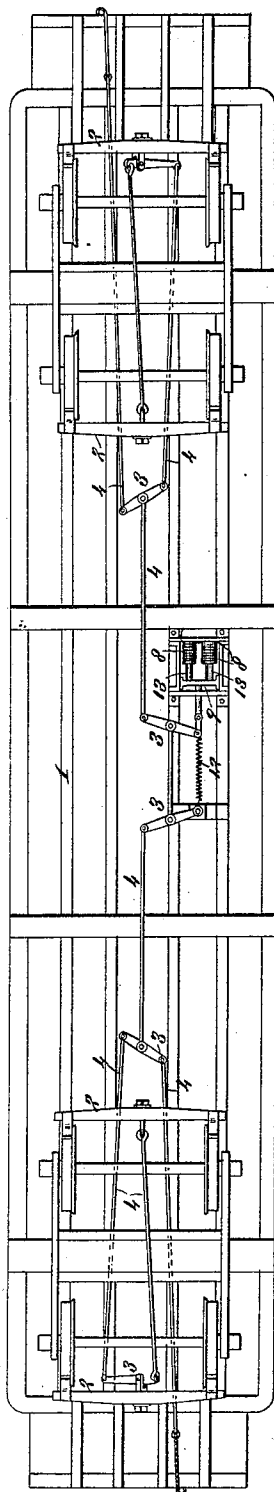
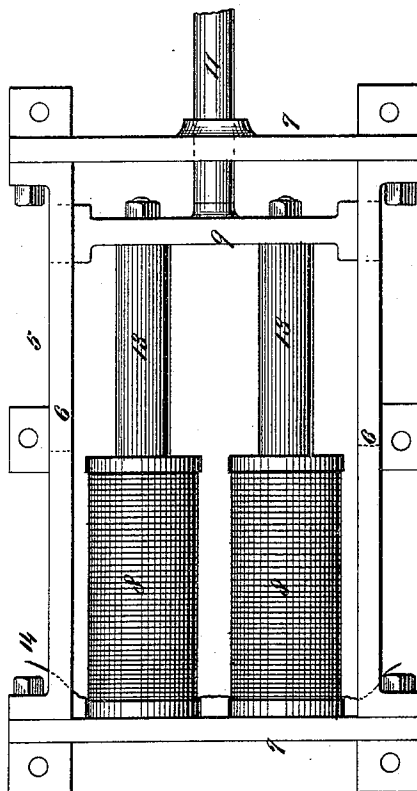


Fig. III



Attest:
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attys

UNITED STATES PATENT OFFICE.

EDMOND VERSTRAETE, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO
PETER M. KLING, OF SAME PLACE.

ELECTRIC RAILWAY-BRAKE.

SPECIFICATION forming part of Letters Patent No. 467,252, dated January 19, 1892.

Application filed August 8, 1890. Serial No. 361,461. (No model.)

To all whom it may concern:

Be it known that I, EDMOND VERSTRAETE, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful
5 Improvement in Electric Railway-Brakes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 My invention refers to an electric brake for railway-cars, particularly adapted for steam-cars; and my invention consists in features of novelty hereinafter fully described, and pointed out in the claim.

15 Figure I is a bottom view of a car provided with my improved brake. Fig. II is an enlarged side view of the frame which holds the cross-head, the magnets, and the cores. Fig. III is a top view of same.

20 Referring to the drawings, 1 represents the body of a railway-car to which my invention may be applied. It is provided, as usual, with the brake-beams 2, levers 3, and connecting-rods 4. No novelty is claimed for the beams,
25 levers, and connecting-rods, and they may be of any ordinary or common construction.

5 represents a frame, preferably rectangular in shape and composed of sides 6 and ends 7. This frame is permanently secured to the
30 car-body, as shown in Fig. I.

8 represents magnets secured to one end of the frame 5 and projecting toward the other end.

9 represents a sliding cross-head fitting between the sides 6 of the frame 5 and having reduced or tenon ends fitting in slots 10 in the sides, as shown in Fig. II and by dotted lines in Fig. III. This cross-head has a rod
35 11, which passes through a perforation in one

of the ends 7 of the frame, as shown in Fig. 40 III, and its outer end is connected to a pair of the levers 3, as shown in Fig. I, one of the levers being connected to the rod by a spring 12, which serves to move the cross-head to its
45 outer position.

13 represents cores secured to the cross-head 9 and projecting inwardly therefrom toward the magnets 8. There is a core for each magnet, and these cores, with the cross-head, which
50 would preferably be made of soft iron, form the horseshoe.

14 represents the wire by which the current is conducted to the magnets. When the brakes are to be applied, the current is turned on and the cores are attracted to the magnets, drawing
55 the cross-head 9 inwardly and applying the brakes. To release the brakes, the current is cut off and the cross-head and cores are drawn back by the spring 12.

A brake of this kind can be very easily applied at a comparatively small expense.

I claim as my invention—

In a car-brake, the combination of the frame 5, composed of the sides 6 and ends 7, the magnets 8, secured to one of the ends 7 of the
65 frame, a sliding metal cross-head 9, fitting in slots 10, made in the sides 6 of the frame, cores 13, secured to the cross-head, a rod 11, passing through a suitable perforation in the other end 7 of the frame and also secured to the
70 cross-head, and a pair of brake-levers 3, one of which is pivotally connected to the rod 11 and the other through the spring 12, all substantially as herein set forth.

EDMOND VERSTRAETE.

In presence of—

THOS. KNIGHT,
A. M. EBERSOLE.