

No. 781,352.

PATENTED JAN. 31, 1905.

J. F. ORR.
TRACK BRAKE.

APPLICATION FILED JUNE 9, 1904.

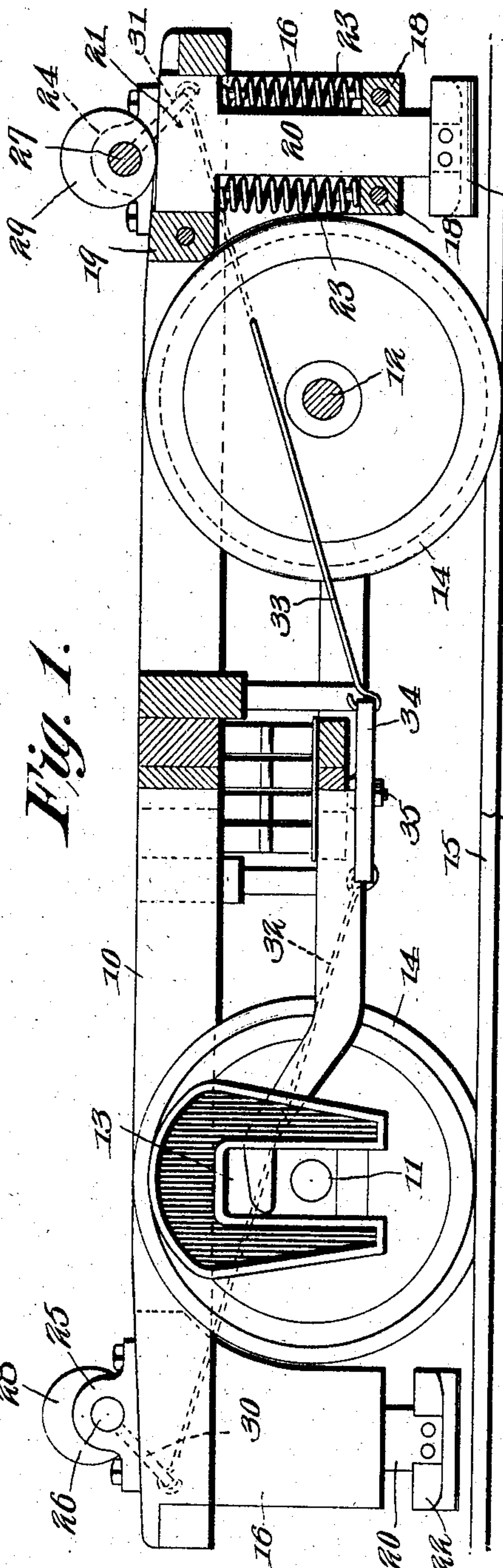


Fig. 1.

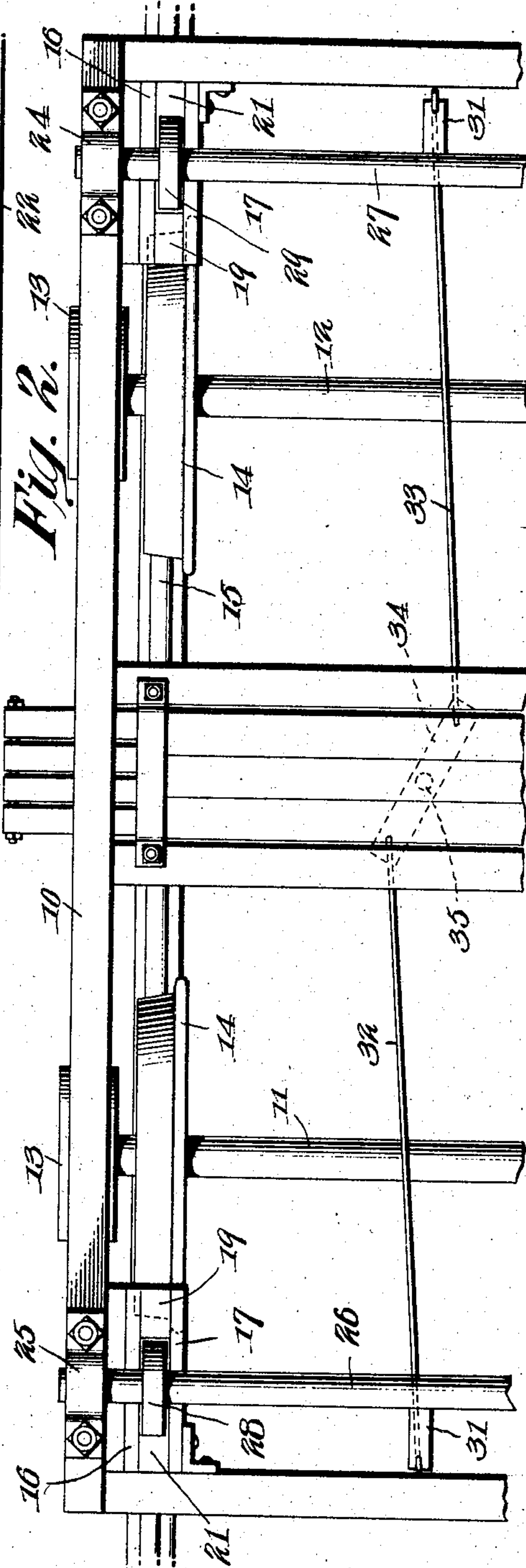


Fig. 2.

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Fig. 3.

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UNITED STATES PATENT OFFICE.

JAMES FRANKLIN ORR, OF BELLEVILLE, CANADA.

TRACK-BRAKE.

SPECIFICATION forming part of Letters Patent No. 781,352, dated January 31, 1905.

Application filed June 9, 1904. Serial No. 211,863.

To all whom it may concern:

Be it known that I, JAMES FRANKLIN ORR, residing at Belleville, in the Province of Ontario and Dominion of Canada, have invented
5 a new and useful Track-Brake, of which the following is a specification.

This invention relates to that class of railway-car brakes which are applied directly to the rails by pressure applied downwardly
10 from the truck-frames, and has for its object to improve the construction and increase the efficiency of devices of this character.

With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain
15 novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation, it being understood that the invention
20 is not necessarily limited thereto, as various changes in the shape, proportions, and general assemblage of the parts may be resorted to without departing from the principle of the invention or sacrificing any of its advantages, and the right is therefore reserved of making all the changes and modifications which fairly fall within the scope of the invention and the claims made therefor.

In the drawings thus employed, Figure 1 is
35 a side elevation, partially in section, of a railway-car truck with the improved brake applied. Fig. 2 is a plan view of one side of the same. Fig. 3 is a detail view of the brake-shoe and its operating-bar detached.

40 The improved device may be applied to any of the various forms of railway-car trucks employed either for freight or passenger traffic, but for the purpose of illustration is shown applied to an ordinary form of such a structure, in which the frame 10, axles 11 12, axle-bearings 13, and traction-wheels 14 are of the usual form and arranged in the usual manner and mounted upon the rails 15.

The improved device comprises a frame or

casing formed of plates 16 17, spaced apart
50 by space-blocks 18 and 19, bolted or otherwise secured to the truck-frame 10 just in advance of each of the traction-wheels and in vertical alinement above the rails.

Mounted for vertical movement in each of
55 the frames or casings is a bar 20, having a laterally-projecting head 21 and with its lower end projecting beneath the casing and provided with a brake-shoe 22 for engaging the rails when the bars are depressed. 60

Springs 23 are disposed between the head projections 21 of the bar 20 and the lower spacer-blocks 18 and exerting their force to maintain the bar and its attached shoe 22 in its inoperative or elevated position when the
65 operating force is withdrawn.

Attached to the frame 10 opposite the casings which carry the bars 20 are bearings 24 25 for rotatively supporting shafts 26 27, having cams 28 29 for bearing upon the upper
70 ends 21 of the bars 20 and depressing them when the shafts are rotated, as will be obvious.

Any suitable means may be employed to actuate the shafts 26 27, but will preferably be so constructed as to move them in unison,
75 so that the four brake-shoes are applied at the same time.

For illustration the shafts 26 27 are provided with lever-arms 30 31, from which rods 32 33 lead to the ends of a lever member 34,
80 the latter centrally pivoted, as at 35, to the truck-frame 10 for connection, as by rods, in any suitable manner to the brake-rods or other means for operating the same.

The rods from the lever 35 may be connected, as will be obvious, to the ordinary air-brake mechanism of the cars. By this means it is obvious that a very simply-constructed and easily applied and operated brake mechanism is produced which may be applied to
90 any of the various forms of car-trucks in use upon the various railroads and will operate very efficiently upon the rails and will not, therefore, produce any deleterious effects upon the wheels or cause them to slide or skid
95 upon the rails. The formation of flat wheels is thus entirely obviated when the improved brake is employed.

Having thus described the invention, what is claimed is—

1. The combination with a railway-car-truck frame, of a plurality of casings formed of
5 spaced side plates spaced apart by spacer-
blocks and connected to the truck-frame in
advance of the wheels of the same and above
the rails, bars mounted for vertical movement
in said casings and having at one end brake-
10 shoes for bearing upon the rails when the
bars are depressed and with lateral exten-
sions at the other end, springs disposed within
said casing and bearing against said lateral
extension upon said bar, and means carried
15 by said truck-frame for depressing said bars
to cause said brake-shoes to engage the rails.

2. The combination with a railway-car-truck frame, of a plurality of casings formed of
spaced side plates spaced apart by spacer-
20 blocks and connected to the truck-frame in

advance of the wheels of the same and above
the rails, bars mounted for vertical movement
in said casings and having at one end brake-
shoes for bearing upon the rails when the
bars are depressed and with lateral exten- 25
sions at the other end, springs disposed within
said casing and bearing against said lateral
extension upon said bar, shafts mounted for
rotation transversely of said truck-frame and
having cams for engaging said movable bars, 30
and means carried by said truck-frame for ac-
tuating said shafts.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

JAMES FRANKLIN ORR.

Witnesses:

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