

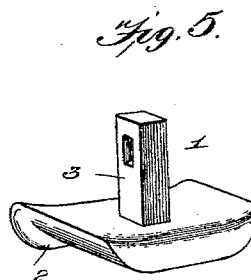
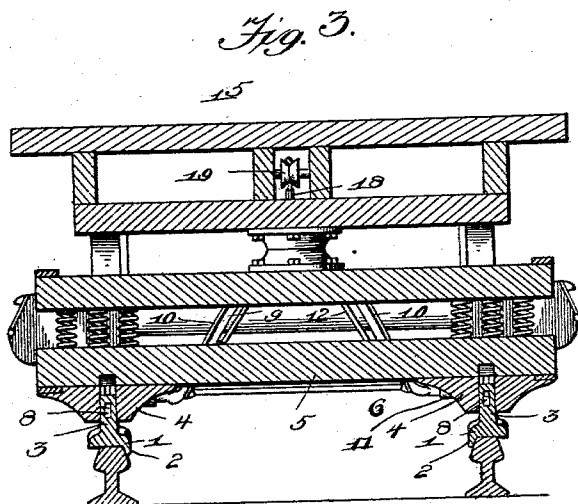
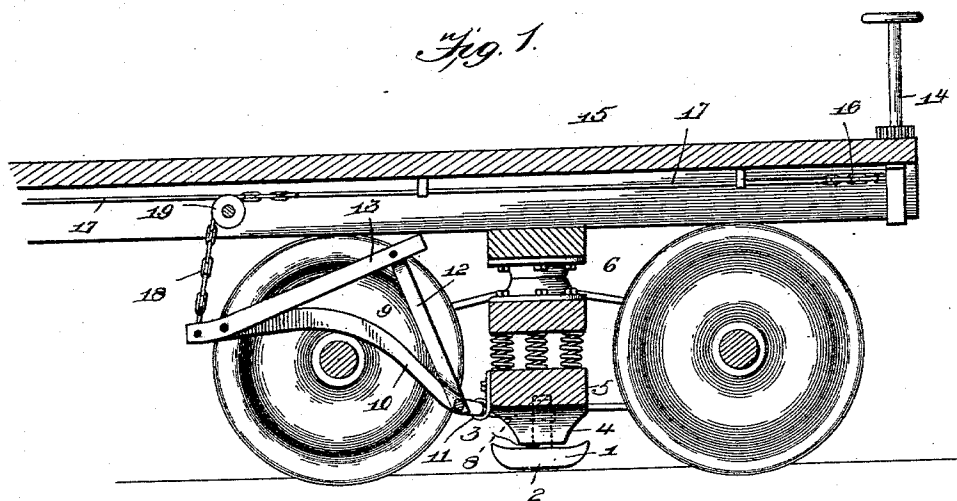
(No Model.)

2 Sheets—Sheet 1.

L. KNEEDLER & E. VORPE.
TRACK BRAKE.

No. 556,723.

Patented Mar. 17, 1896.



Inventors

Louis Kneeder

Witnesses

John C. Shaw.
J. F. Riley

By their Attorneys, *Eugene Vorpe,*

C. A. Snow & Co.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

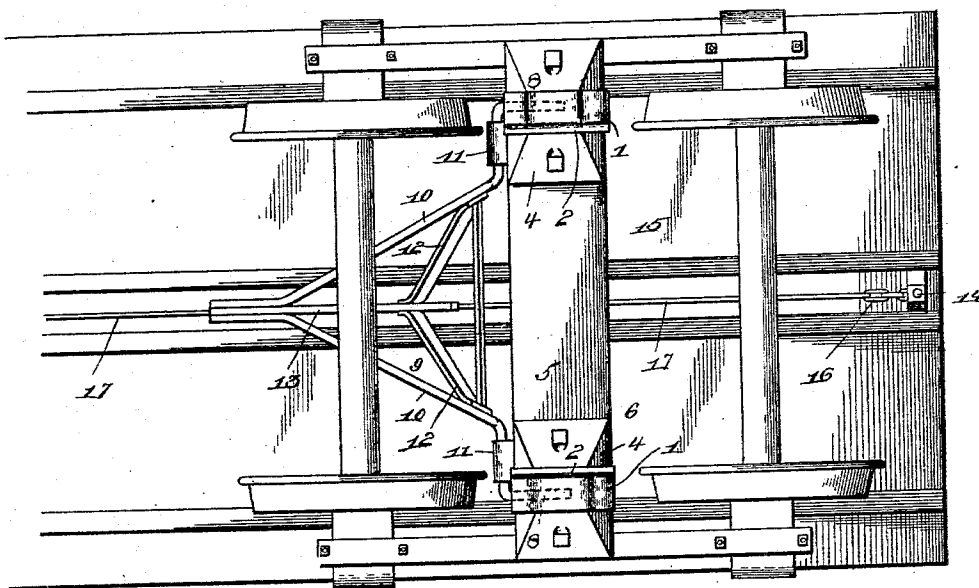


Fig. 4.

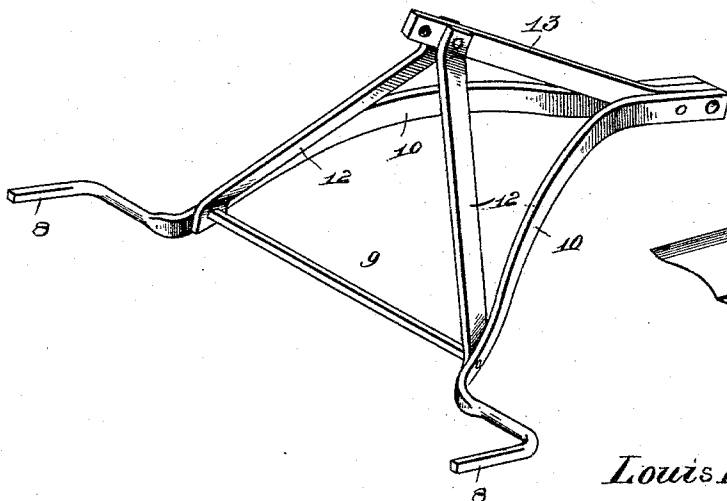
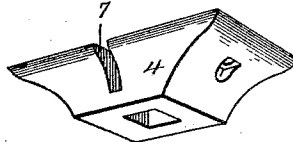


Fig. 6.



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UNITED STATES PATENT OFFICE.

LOUIS KNEEDLER, OF CALEDONIA, AND EUGENE VORPE, OF MOUNT
AYR, IOWA.

TRACK-BRAKE.

SPECIFICATION forming part of Letters Patent No. 556,723, dated March 17, 1896.

Application filed May 21, 1895. Serial No. 550,111. (No model.)

To all whom it may concern:

Be it known that we, LOUIS KNEEDLER, residing at Caledonia, and EUGENE VORPE, residing at Mount Ayr, in the county of Ringgold and State of Iowa, citizens of the United States, have invented a new and useful Track-Brake, of which the following is a specification.

The invention relates to improvements in track-brakes for railway and other cars.

The object of the present invention is to improve the construction of track-brakes and to provide a simple, inexpensive, and efficient one, capable of being readily mounted on a car-truck and of being connected with the ordinary brake-operating mechanism and adapted to be quickly brought into operative position and to check and stop a train in a short interval of time.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a longitudinal sectional view of one end of a car provided with a track-brake constructed in accordance with this invention. Fig. 2 is a reverse plan view of the same. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of the brake-lever. Fig. 5 is a similar view of one of the brake-shoes. Fig. 6 is a detail view of one of the sockets of the shanks of the brake-shoes.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

11 designate a pair of similar brake-shoes disposed horizontally and located centrally of a truck between the wheels thereof and adapted to be moved vertically and to be carried downward into engagement with the rails to stop a car or train of cars, and thereby avoid the wear and injury resulting from brake-shoes being applied to the wheels of a car. The brake-shoes are provided at their inner sides with flanges 2 to prevent them from leaving the rails, and they are mounted on vertically-movable bars or shanks 3, mounted in vertical sockets 4, which are se-

cured to the transom 5 of a car-truck 6, or to any other suitable portion thereof.

The shanks or bars 3 are rectangular in cross-section, and the openings of the sockets 4 are of like configuration, and the sockets 4 are provided with vertical slots 7, receiving crank-arms 8 of a lever-frame 9, on which the brake-shoes are operated.

The lever-frame is composed of two converging sides or bars 10, each provided at one end with a crank-bend, which is journaled in a bearing 11, and which extends through the adjacent slot 7 and fits in an opening of the adjacent shank or bar 3, whereby the latter is connected with the lever-frame.

The lever-frame is supported by a triangular brace 12, having its bottom or base interposed between the divergent or separated portions of the sides 10 of the lever-frame and connected at its top or apex with the adjacent ends of the sides of the lever-frame by a bar 13. This construction forms a powerful lever-frame, and the latter is adapted to raise and lower the brake-shoes simultaneously, and the brake-shoes, being centrally disposed beneath the truck over the rails, are adapted to lift the car, so that the entire weight of the latter will be utilized for stopping it.

The lever-frame is adapted to be operated by hand by means of the ordinary construction of brake-shaft 14, having a hand-wheel, and mounted on the car 15, and connected by a chain 16 with rod connections 17, the chain 16 being adapted to be wound around the shaft in the usual manner. The inner terminal of the rod connections 17 is designed to be connected by a chain 18 with the brake mechanism at the other end of the car, and the chain 18 of the truck 6 passes over a pulley 19 and is connected to the upper or outer end of the lever-frame. The lever-frame may also be attached to any suitable air-brake connections, so that the brake may be applied either by hand or by compressed air or the like.

It will be seen that the brake is exceedingly simple and inexpensive in construction, that it is adapted to be readily mounted on the ordinary construction of car-trucks, and that it possesses great power, as the entire weight

of a car may be utilized in the application of the brake.

It will also be seen that the brake-shoes will not leave the rails, and that by operating on the latter instead of the wheels of a car all the injurious effects incident to car-wheel brakes are obviated.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What we claim is—

1. In a track-brake, the combination of a truck, sockets mounted on the truck and located at opposite sides thereof and provided with vertical openings and having slots communicating with the openings, brake-shoes provided with bars or shanks arranged in the openings of the sockets, a lever-frame journaled on the truck and provided at opposite sides with crank-arms extending through the slots of the sockets and connected with the

shanks of the brake-shoes, means for operating the lever-frame, substantially as described.

2. In a track-brake, the combination of a truck, vertically-movable brake-shoes, and a lever-frame journaled on the truck and composed of divergent sides having crank-arms connected with the brake-shoes, a triangular brace extending upward from and interposed between the divergent ends of the sides of the frame, and a bar extending from the top or apex of the triangular brace to the adjacent ends of the sides of the frame, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

LOUIS KNEEDLER.
EUGENE VORPE.

Witnesses:

F. F. FULLER,
I. W. KELLER.