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2,444,500

TRACK BRAKE FOR KILN CARS AND THE LIKE

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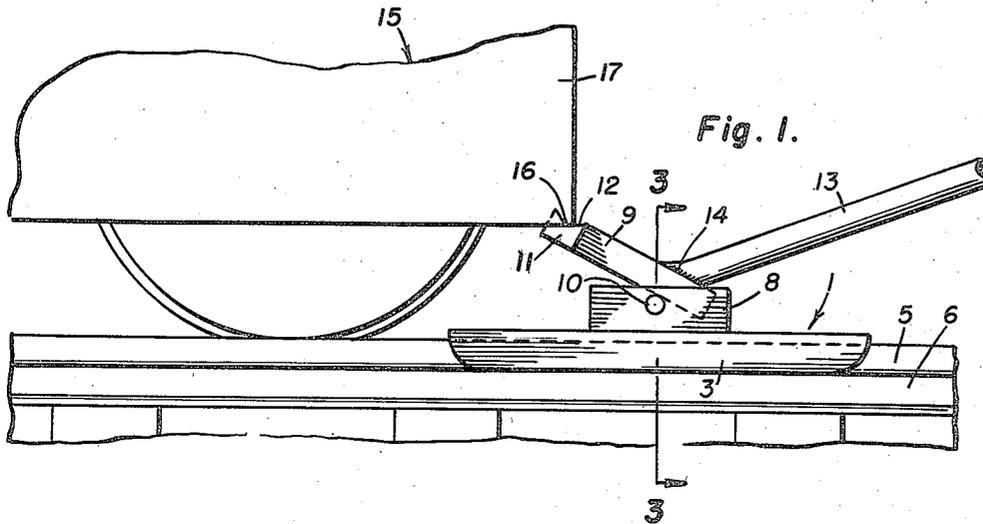


Fig. 1.

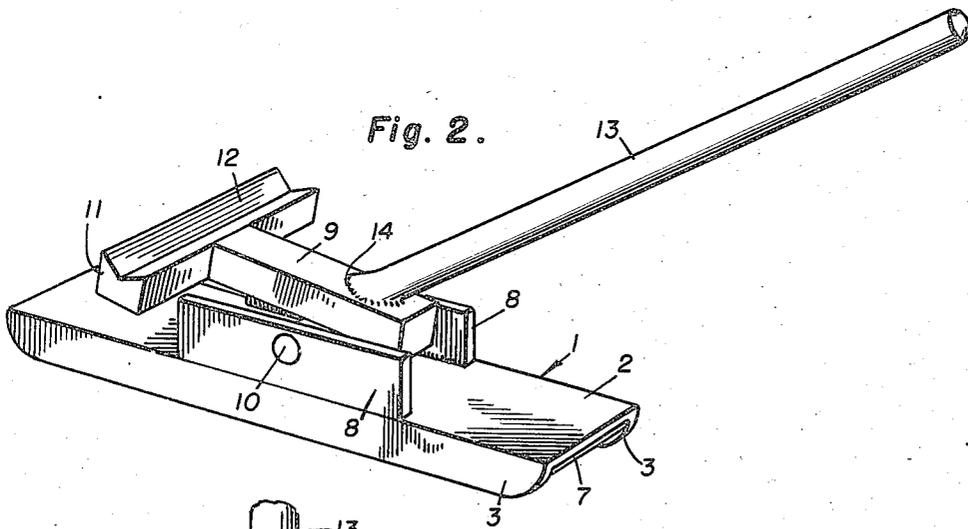


Fig. 2.

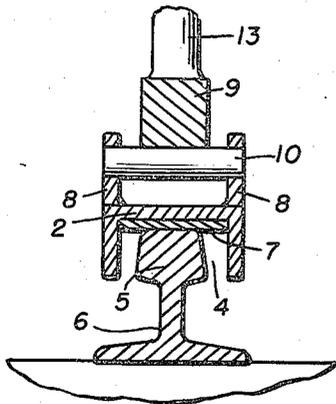


Fig. 3

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UNITED STATES PATENT OFFICE

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TRACK BRAKE FOR KILN CARS AND THE LIKE

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3 Claims. (Cl. 188-41)

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My invention relates to improvements in track brakes for use especially in connection with kiln cars, the primary object in view being to provide a simple form of inexpensively constructed track brake for frictionally engaging a rail of the car tracks to slow down and/or stop the travel of a kiln car running on the tracks.

Other and subordinate objects, also comprehended by my invention, together with the precise nature of my improvements, and the advantages thereof, will be readily understood when the succeeding description and claims are read with reference to the drawings accompanying and forming part of this specification.

In said drawings:

Figure 1 is a view in side elevation illustrating my improved track brake, in a preferred embodiment thereof, applied to a kiln car and a rail of the car tracks;

Figure 2 is a view in perspective of the track brake drawn to a larger scale;

Figure 3 is a view in transverse section taken on the line 3-3 of Figure 1 and drawn to a larger scale.

Referring to the drawing by numerals, according to my invention, as illustrated, a track brake is provided comprising an elongated brake shoe 1 with a flat top 2 and longitudinal side flanges 3 depending from said top 2 and forming a longitudinal bottom channel 4 in the shoe substantially wider, preferably, than the ball 5 of the usual track rail 6 commonly used in kilns for kiln cars. A suitable liner 7 is fixed, in any desired manner, in the bottom of the channel 4 to extend from end to end of the shoe 1. A pair of laterally spaced flanges 8 are provided on the top 2, relatively shorter than the shoe 1, and which are centered in the transverse center of said shoe and arise, preferably, from opposite side edges of the top 2. The described brake shoe is preferably formed in one piece of any suitable light weight strong metal.

A rocker bar, preferably of rectangular cross section, is suitably fixed intermediate the ends thereof, on a transverse stud 10 having its ends journaled in the flanges 8 so that said bar 9 is disposed between the flanges 8 to extend longitudinally of the shoe 1 and be rocked vertically about an axis transverse to said shoe.

A front cross bar 11 is rigidly secured on one end of the rocker bar 9, or formed integrally therewith, as desired, and which is provided with a longitudinal top V-groove 12 therein. The rocker bar 9 and the cross bar 11 form a T-shaped rocker as will be clear.

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A handle bar 13 is rigidly connected, as by welding 14, to the top of the rocker bar 9 on the opposite side of the stud 10 from the cross bar 11 and to incline upwardly and rearwardly from the rear end of the rocker bar 9 for a substantial distance crosswise of the axis of rocking movement of said bar 9.

Referring now to the use and operation of the described invention. The shoe 1 is placed on a rail 6 behind a kiln car 15 with the channel 4 receiving the ball 5 of said rail and the liner 7 imposed on said ball and with the cross bar 11 facing the rear end of the car 15. By means of the handle 13, the rocker bar 9 is rocked to elevate the cross bar 11 so as to seat the bottom rear edge 16 of the car body 17 in the V-groove 12 whereby forward travel of the car 15 will cause the shoe 1 to be dragged along the rail 6 as long as sufficient downward pressure is exerted on the handle bar 13 to maintain said rear edge 16 of the car body 17 seated in the groove 12. Now, by exerting variable downward pressure on the handle bar 13, the cross bar 11 may be pressed upwardly against said edge 16 to cause variable downward pressure to be exerted against the shoe 1 to obtain variable frictional engagement between the liner 7 and the ball 5 of the rail 6 sufficient to retard the car 15 or stop the same, as desired. As will be clear, the rocker bar 9 on one side of the stud 10 forms a short lever arm, and the handle bar 13 provides a long lever arm on the other side of said stud, whereby powerful leverage may be exerted to obtain the required breaking action.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention, without further explanation.

Manifestly, the invention, as described, is susceptible of modification, without departing from the inventive concept, and right is herein reserved to such modifications, as fall within the scope of the appended claims.

What I claim is:

1. A track brake for a car traveling on a rail comprising a brake shoe adapted to be imposed on said rail to slide along the same in the rear of the car, means pivoted on top of said shoe for upward swinging movement and adapted to be swung upwardly against the bottom of said car to cause downward pressure to be exerted against said shoe, said means including a grooved member adapted to seat a part of said car therein to couple the shoe to said car to be slid along said rail thereby, and a handle bar connected to said

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means for downward swinging to swing said means upwardly.

2. A track brake for a car traveling on a rail comprising a brake shoe adapted to be imposed on said rail to slide along the same in the rear of the car, means pivoted on top of said shoe for upward swinging movement and adapted to be swung upwardly against the bottom of said car to cause downward pressure to be exerted against said shoe, said means including a grooved member adapted to seat a part of said car therein to couple the shoe to said car to be slid along said rail thereby, and a handle bar connected to said means for downward swinging to swing said means upwardly, said means comprising a rocker bar on which said grooved member is fastened.

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3. A track brake for a car traveling on a rail comprising a brake shoe adapted to be imposed on said rail to slide along the same in the rear of the car, means pivoted on top of said shoe for upward swinging movement and adapted to be swung upwardly against the bottom of said car to cause downward pressure to be exerted against said shoe, said means including a grooved member adapted to seat a part of said car therein to couple the shoe to said car to be slid along said rail thereby, and a handle bar connected to said means for downward swinging to swing said means upwardly, said shoe having side guide flanges thereon for straddling said rail, and a friction gripping liner in said shoe.

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