Dec. 4, 1923. 1,476,099

G. E. OSTERMAN

PORTABLE BRAKE SHOE

Filed July 14, 1921

Fig. 2

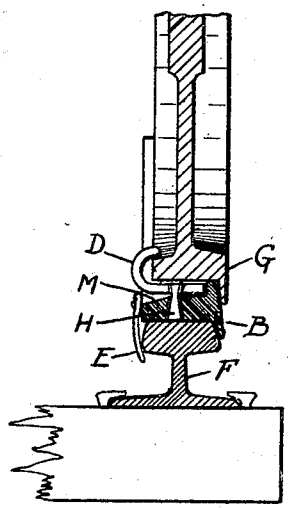


Fig. 1

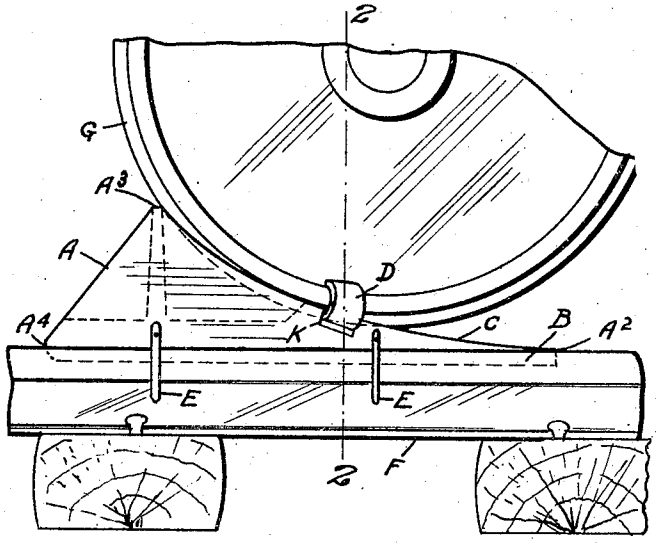


Fig. 3

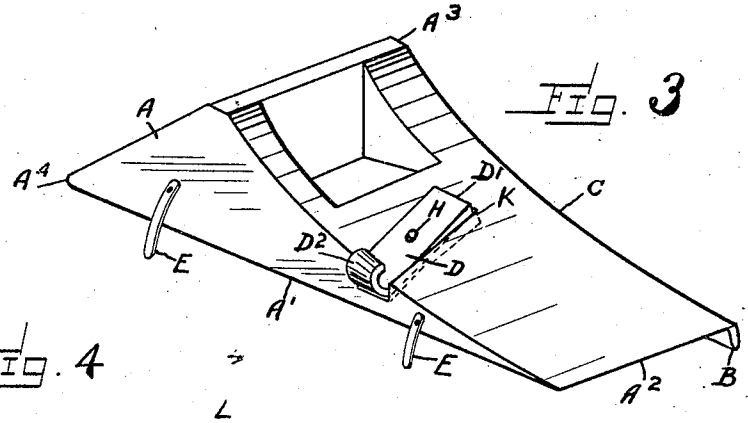
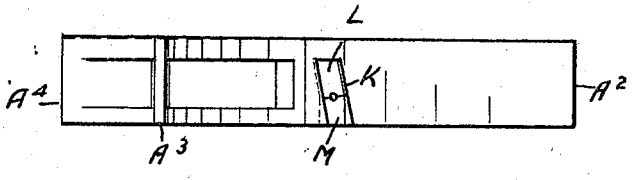


Fig. 4



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UNITED STATES PATENT OFFICE.

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PORTABLE BRAKE SHOE.

Application filed July 14, 1921. Serial No. 484,823.

To all whom it may concern:

Be it known that I, GUSTAF E. OSTERMAN, a subject of the King of Great Britain, residing at Montreal, Province of Quebec, Dominion of Canada, have invented new and useful Improvements in Portable Brake Shoes, of which the following is a specification.

This invention relates to improvements in braking devices for railway cars and has for its object to provide means whereby a car may be stopped while moving on the rails either on a grade or shunting.

A further object is to provide a portable brake shoe that can be readily applied to the rail and will be locked to the car wheel when the latter mounts the brake shoe.

This invention consists in the novel features of construction combination and arrangement of parts as set forth in detail hereafter.

Reference is to be made to the accompanying drawings in which—

Fig. 1 is a side view of the brake shoe mounted on the rail with the car wheel in a locked position.

Fig. 2 is a cross sectional view of Fig. 1, on line 2—2.

Fig. 3 is a perspective view of the brake shoe.

Fig. 4 is a plan view of the shoe.

The brake shoe consists of the base A, having a flat lower surface A^1, adapted to rest on the rail F, and a flanged edge B, extending the full length of the shoe on one side.

The upper surface C, is curved as shown in Figs. 1 and 2, and rises from the edge A^2, to the apex A^3, and then descends sharply to the edge A^4.

The upper portion of the shoe may be hollow or cut away for the sake of reducing the weight of the shoe as shown in Figs. 1 and 2.

Securely attached to the side opposite to the flange B, are two or more springs E E projecting downwards and adapted to grip the head of the rail F, when the shoe is placed in position as shown in Fig. 2.

On the upper surface C, about the middle of the curve is situated a diagonal slot extending towards the spring E side of the shoe and running towards the end A^2.

The inner portion of the slot K, has a flat surface L, while the outer portion has a bevelled surface M.

In the slot K, a hook D, is loosely secured by the rivet H, and adjusted so that the hook D, normally rests on the bevelled surface M, and the end D^1, projects above the surface C, while the bend D^2, is swung downwards to permit the rim of the car wheel to mount the curve C,.

The operation of my invention is as follows:—

The shoe is placed on the rail with the thin edge facing the moving car that it is desired to stop. The flange B, and the springs E, E, hold the shoe securely in position on the rail.

When the wheel of the advancing car ascends the curved surface C, and reaches the hook D, it forces down the end D^1, causing the bend D^2, to rise and grip the outer rim of the car wheel G, thereby locking the shoe A, to the wheel G.

The shoe is therefore carried along the rail by the momentum of the car until it slows down and stops the car.

What I claim is:

1. In a brake shoe the combination of a body portion having a lower flat surface adapted to rest on a rail, an upper curved surface adapted to support the tyre of a car wheel and a hook adapted to lock the shoe to the wheel, one end of which projects normally above the curved surface.

2. In a brake shoe the combination of a body portion having a lower flat surface adapted to rest on a rail, an upper curved surface adapted to support the tyre of a car wheel and a hook pivoted in a slot in the curved surface adapted to lock the shoe to the car wheel.

3. In a brake shoe the combination of a body portion having a lower flat surface adapted to rest on a rail an upper curved surface adapted to support the tyre of a car wheel and a hook pivoted in a diagonal slot on the surface of the shoe adapted to lock the shoe to the car wheel.

4. In a brake shoe the combination of a body portion having a lower flat surface adapted to rest on a rail, an upper curved surface adapted to support the tyre of a car wheel, and a hook pivoted in a slot on the surface of the shoe with its inner end normally projecting above the upper surface of the shoe and its outer bent end depressed to permit the tyre of the car wheel to pass in mounting.

5. In a brake shoe the combination of a

body portion having a lower flat surface adapted to rest on a rail, a flange on one side and a plurality of springs projecting downwards from the other side and adapted to hold the shoe in position, an upper curved surface with a hook pivoted in a diagonal slot on the curved surface, normally with its curved end depressed outwardly and its inner end projecting above the curved surface, adapted to lock the shoe to the wheel of a car automatically.

6. In a brake shoe the combination of a body portion having a lower flat surface adapted to rest on a rail and means to hold the shoe in position thereon, and an upper curved surface adapted to support the tyre of a car wheel with a hook pivoted in the curved surface, adapted to lock the shoe to the wheel.

7. In a portable brake shoe, a hook member loosely pivoted in a transverse slot in the curved surface of the shoe adapted to grip the outer rim of a car wheel.

8. In a brake shoe the combination of a body portion with a curved upper surface and a hook member pivoted transversely therein, adapted to lock the rim of a wheel that has mounted the shoe.

GUSTAF E. OSTERMAN.