No. 833,844. PATENTED OCT. 23, 1906.

W. E. McKAY.

BRAKE.

APPLICATION FILED JUNE 27, 1906.

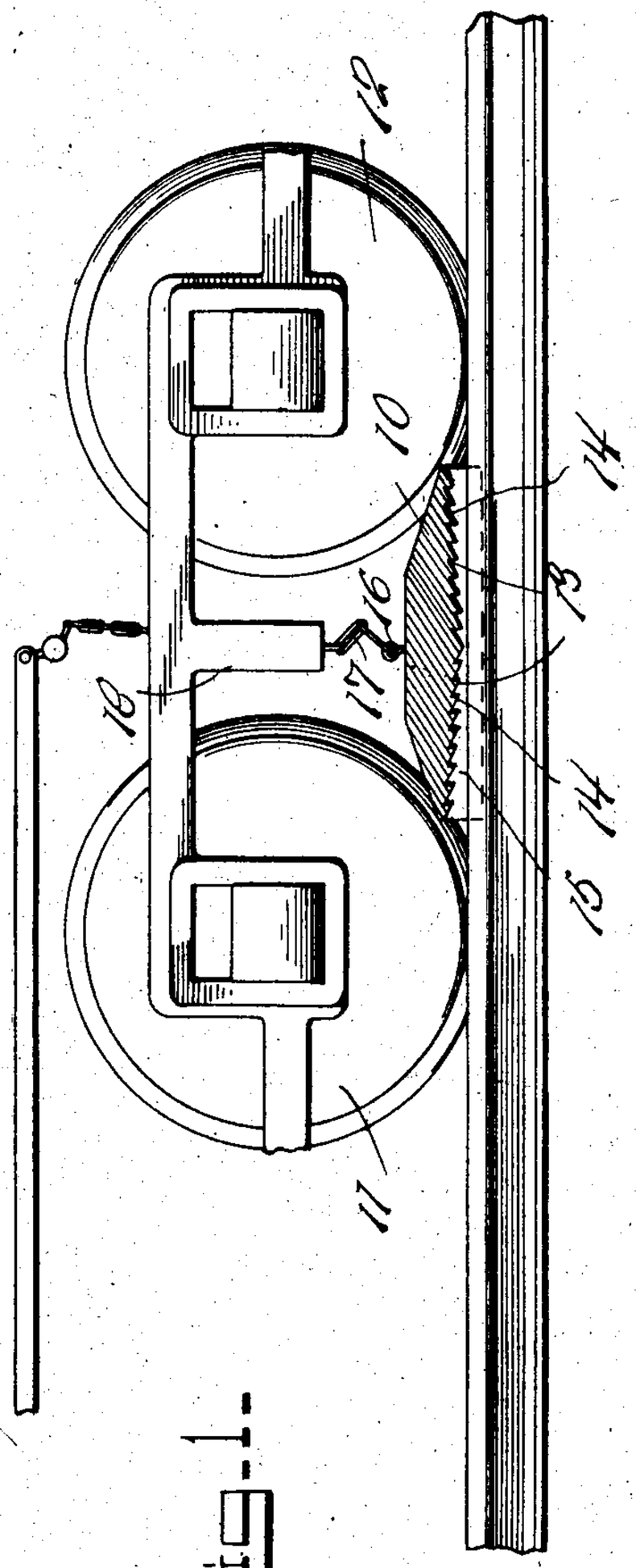

FIG. 1.

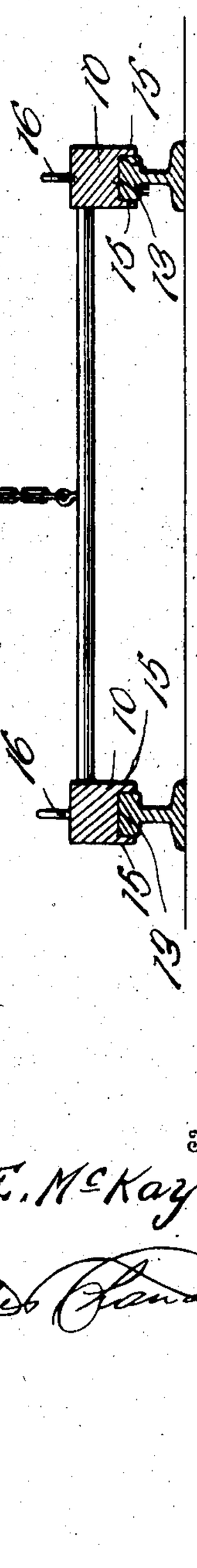

FIG. 2.

Witnesses
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BRAKE.

No. 833,844. Specification of Letters Patent. Patented Oct. 23, 1906.

Application filed June 27, 1906. Serial No. 323,679.

To all whom it may concern:

Be it known that I, WALTER E. McKAY, a citizen of the United States, residing at Leland, in the county of Nez Perces, State of Idaho, have invented certain new and useful Improvements in Brakes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to brakes for street or motor cars; and it has special reference to that class of devices commonly known as "emergency-brakes."

The nature of the invention is embodied in a brake shoe or chock that is capable, in case of necessity, to be quickly interposed between the rear wheels of a truck and the rails to practically stop the rotation of said wheels and cause the weight of the car borne by the said wheels to be borne by the shoe, which moves upon the rails and is frictionally resisted not only by the weight thereon, but by teeth, serrations, or roughened surfaces of the shoes that are calculated to take into the tread-surfaces of the rails and impede their movement, so far as mechanical achievements can accomplish it.

The improvements, as stated, are included in the chocks which are supported between two wheels of a truck, one on each side, and are brought into action in case of necessity, so that no matter in which direction the truck may be moving substantially all of the rear half of the chocks or shoes will be made to trail and act upon the rear wheels to stop their movement, while the forward or advance half of the chocks or brake-shoes will be inoperative and be held out of the way.

The nature and object of the invention have been set forth so far in the foregoing statements as to warrant me in proceeding at once with a disclosure of the invention *in extenso*, in view of the annexed drawings, forming a part of this specification, of which drawings—

Figure 1 is a side elevation of my improved brake-shoe. Fig. 2 is a transverse section of the shoes engaged with the rails.

Similar figures of reference designate similar parts or features, as the case may be, wherever they occur.

The shoe 10 is of a length sufficient to be interposed as a chock under either of the wheels 11 or 12, according as to which for the time being is the front and which the rear wheel. It is of course necessary that the chock should be applied to the hind wheels, which when the car is descending an incline or has attained great speed or is moving on a frosty track and it is necessary for it to be stopped at once, the shoe will be applied and the hind wheel will be crowded on the incline of the rear half of the shoe or chock and the frictional resistance to the shoe on the rail will operate to stop the train, as before described. The base of the shoe is made with double inclines or rocking surfaces 13 and is provided on each side of the center with serrations or teeth 14, inclining toward the center. It is also provided on opposite longitudinal sides with pendent flanges 15, that fit on opposite sides of the rails, the flanges keeping the shoes from leaving the rails laterally.

At the longitudinal center of the shoe on its top it is provided with a strong ring 16, that engages the lower end of a link 17, the upper end of which has a jointed connection with a cross-timber 18 of the truck, the latter being adapted to be raised or lowered by the rods and chains connected mediately or immediately with the winding-drum or other parts of the brake mechanism (not shown) and forming no part of my present invention, but through the intervention of which the cross-timber 18 is adapted to be raised and lowered. The connection of the cross-timber with the invention being flexible, as described, when the brake-shoe is lowered upon the rails the frictional resistance of the latter to its movement will hold it back, so that its rear end will trail and become a chock to the rear wheels of the truck, as shown in the drawings, and the shoe will be tilted so that the rear wheel will ride upon it and make the rear half of the shoe operative in stopping the progress of the truck.

When the train is stopped, the shoes will be raised from the rails, and when the truck is run in the opposite direction and necessity arises the shoes will be lowered and the opposite ends will trail, while the forward ends will advance, thus effecting a stoppage of the truck by a reverse position of the shoes, as will be understood without further description.

What is claimed as the invention is—

1. A brake-shoe or chock for use as described, consisting of a body, the top surface inclining downward from the center in oppo-

site directions, and the bottom surface inclining upward from the center in opposite directions.

2. A brake-shoe or chock for use as described, consisting of a body, the top surface inclining downward from the center in opposite directions, and the bottom surface inclining upward from the center in opposite directions, and pendent flanges on each side of the inclined bottom surface.

3. A brake-shoe or chock for use as described, consisting of a body, the top surface inclining downward from the center in opposite directions, and the bottom surface inclining upward from the center in opposite directions, the bottom surface being provided with teeth or serrations inclining from the ends toward the center.

4. The combination with two wheels of a truck, of a double brake-shoe or chock arranged between them and having a frictional bottom surface to act upon the rails, a bar or supporting device extending between the wheels for raising and lowering the brake-shoes, and a flexible means for connecting the brake-shoes with the bar, whereby, when the brake-shoes are lowered upon the rails of the track, the shoe will drag and the rear portion will trail and become engaged by the rear wheels as a chock.

In testimony whereof I affix my signature in presence of two witnesses.

WALTER E. McKAY.

Witnesses:
S. S. Mosse,
C. N. Matheny.