STINEHART & TAGGART.

Car Brake.

No. 6,150. Patented Feb. 27, 1849.

Fig. 1.

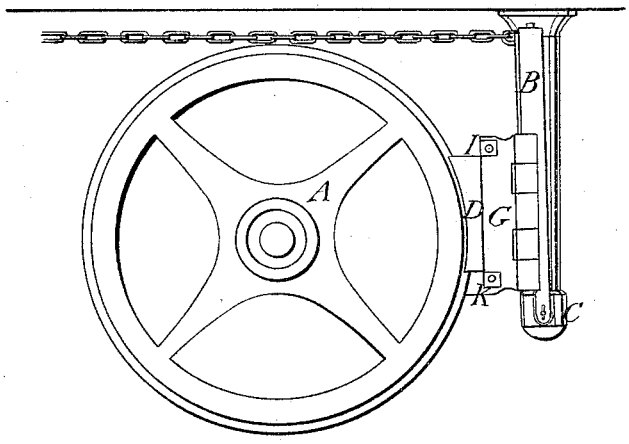


Fig. 2.

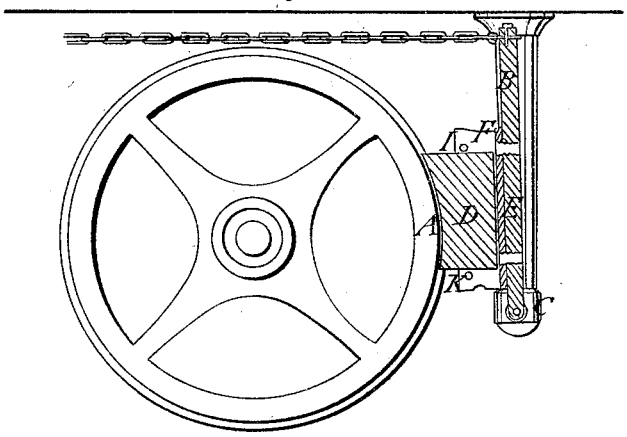
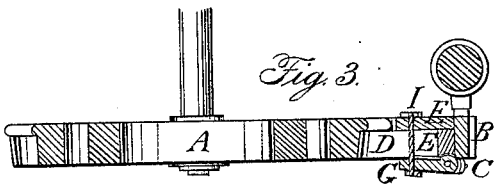


Fig. 3.



UNITED STATES PATENT OFFICE.

WM. STINEHART AND J. TAGGART, OF CHARLESTOWN, MASSACHUSETTS.

BRAKE FOR CARS.

Specification of Letters Patent No. 6,150, dated February 27, 1849.

To all whom it may concern:

Be it known that we, WILLIAM STINEHART and JOHN TAGGART, of Charlestown, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Railway-Car Brakes, which invention is also applicable to carriage or other friction brakes; and we do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

It is well known that the ordinary friction brakes of railroad car wheels are made of wood; which, when the cars are in daily use, soon become so worn as to require renewal, and this, owing to the manner in which they have been made, at considerable expense.

This is not the only objection to such brakes; the time consumed to make the necessary repairs or substitutions being a serious delay in the operations incident to railway transportation.

Figure 1, of the aforementioned drawings denotes a front view of our improved brake as applied to a railway car wheel. Fig. 2 is a vertical, central and longitudinal section of it. Fig. 3 is a horizontal section of it taken through one of the confining screw bolts of the hinged plate.

In said drawings, A, exhibits the wheel, and B, the usual brake lever, turning upon a fulcrum at C; D is the block or piece of wood which is borne against the periphery or tread of the wheel in order to produce friction thereon. The said block of wood where it rests against the wheel is curved to conform to the shape of the surface thereof, in contact with it. In other respects, or in its transverse section, the block is made dovetailing or trapezoidal. The block so made is placed against a back plate E, which is screwed or fastened directly to the brake lever. The said block is also made to rest against a side plate F, which is firmly fastened to, and made to project from the back plate, at an acute angle corresponding with that of the two adjacent sides of the piece of wood. The said two plates E, and F, may be said to be one plate bent into an acute angle. The piece of wood is kept against the said two plates by a third flap or plate G, which is made to rest against the opposite lateral face of it, and is hinged directly to the plate E, in the manner of a door to its frame. Two screw bolts I, K, having nuts upon them are made to pass through the two lateral plates, in such manner as that when the nuts are turned up they shall force the hinged lateral plate against the stationary one, so as to confine the piece of wood between them, and prevent it from slipping out of place. The said bolts pass through the plates just above and below the ends of the piece of wood, as seen in the drawings. They therefore serve to prevent the wood from being slid out of place either upward or downward.

From the above it will be readily seen what an easy matter it will be to remove the friction block of wood, and replace it by another. It will be only necessary to take the nuts from the screw bolts, in order to be enabled to turn the flap on its hinge. This being done the worn block may be removed, and a fresh one put in its place, and be confined thereby screwing the nuts hard up on the bolts.

Such a contrivance applied to the brake lever enables us to make the rubber or friction block in such manner, that the grain of the wood of which it is composed may be presented endwise against the periphery of the wheel, and so as not only to offer a greater resistance to wear, but a better surface for the wheel to rub against than it would if presented to the wheel in any other direction.

What we claim as our invention is—

The stationary support plate, (composed of one plate or two plates E, F,) the hinged flap G, and the confining bolts I, K, (or other mechanical equivalents) in combination together and as applied to the brake lever, and made to sustain the rubbing piece of wood D, substantially in the manner, and for the purpose as herein before specified.

In testimony whereof we have hereto set our signatures this sixteenth day of December A. D. 1847.

WILLIAM STINEHART.
JOHN TAGGART.

Witnesses:
R. H. EDDY,
CALEB EDDY.