

(No Model.)

E. T. WILSON.
RAIL BRAKE.

No. 512,140.

Patented Jan. 2, 1894.

Fig. 1.

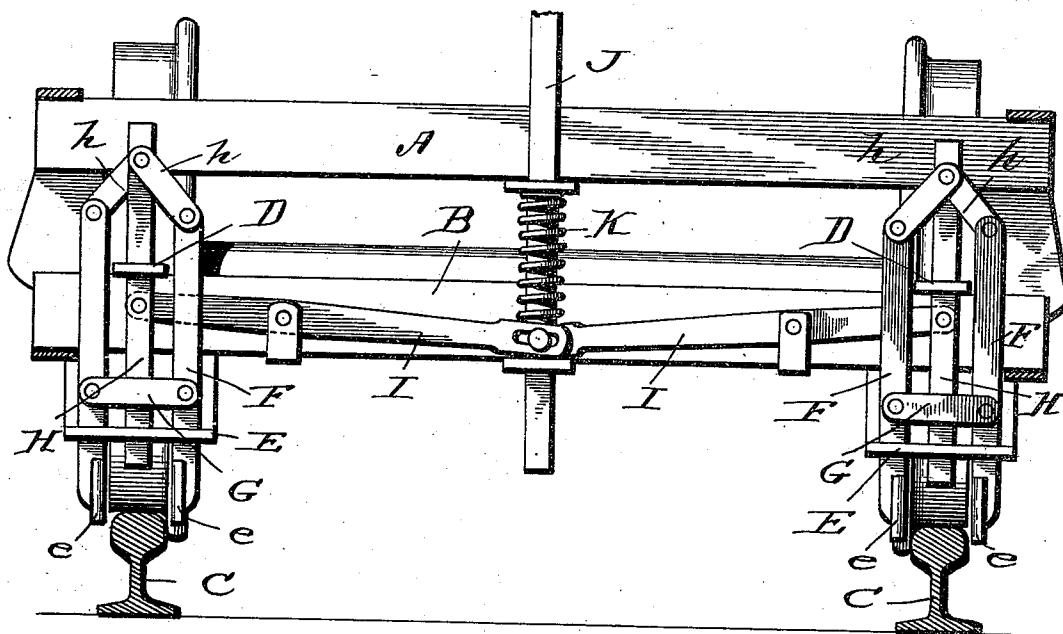
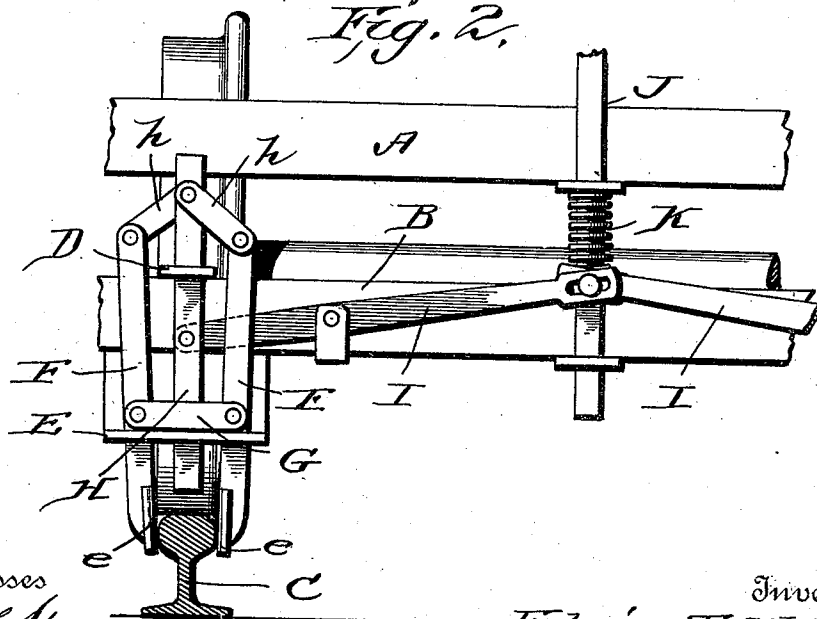


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

EDWIN TENISON WILSON, OF ASHMORE, ILLINOIS.

RAIL-BRAKE.

SPECIFICATION forming part of Letters Patent No. 512,140, dated January 2, 1894.

Application filed November 9, 1893. Serial No. 490,474. (No model.)

To all whom it may concern:

Be it known that I, EDWIN TENISON WILSON, a citizen of the United States, residing at Ashmore, in the county of Coles and State of Illinois, have invented certain new and useful Improvements in Rail Car-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 relates to car brakes of that class which act directly on the rail with lateral pressure against the sides thereof; and aims to provide a simple mechanism for simultaneously raising and lowering the brake beam and tilting the same upon their fulcrum so as to move the brake shoes to and from the sides of the rail.

The improvement consists of the novel features and the peculiar construction and combination of the parts which will be hereinafter more fully described and claimed and which are shown in the annexed drawings, in which—

Figure 1 is a cross section of a car truck showing the application of the invention and the relative position of the same in elevation. Fig. 2 is a detail view of a brake mechanism showing the relative disposition of the parts when the brake shoes are pressed against the sides of the rail.

A car truck A may be of any approved form of construction and is designed to carry the brake mechanism upon a crossed timber B which is provided at each end with upper and lower guides D and E, respectively. The vertical brake beams F are provided in pairs and are pivoted between their ends to a cross bar G and carry brake shoes e at their lower ends which are designed to press laterally against the sides of the rails C. A vertical bar H is adapted to work in the guides D and E and loosely through the cross bar G and is connected at its upper end with the upper ends of the brake beams F by links h. A lever I horizontally disposed and pivoted between its ends to the crossed timber B is operatively connected at its outer end with the vertical bar H by a pivotal joint, and is pivotally attached at its inner end to a vertically operating rod J to which the power is applied for

actuating the brake mechanism. A spring K is applied to the rod J and operates on the same in such a manner as normally to hold the brake mechanism out of operative engagement with the rail. The power for actuating the brake mechanism may be manual or steam and is applied to the said rod J in any convenient manner. It will be understood that each side of the truck will be similarly equipped and that there will be a lever I for operating the brake beam on each side of the truck.

The parts being disposed substantially as shown in Fig. 1 the spring K will serve to hold the brake shoes free of the rails. When it is desired to apply the brake power is applied to the vertical bars J to operate the levers I and the brake shoes e through the intervening connections herein set forth. The first result effected is the lowering of the brake shoes to the plane of the head of the rails C after which, a continued operation of the rod J will cause the brake shoes to move laterally and bear against the sides of the rails with sufficient pressure proportionate to the force applied to the rod J to slacken the speed of the train, as will be readily understood.

The brake shoes e are beveled at their opposite ends on their inner faces to prevent the ends engaging with projecting portions on the sides of the rails, thereby obviating injury to the brake mechanism.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a rail brake for cars, the combination of vertical brake beams connected between their ends by a cross bar a vertical bar H passing loosely through the said cross bar G and held from lateral motion in its vertical movements, and connected at its upper end by pivoted links with the upper ends of vertical beams and means for moving the said bar H vertically whereby the brake beams receive a vertical movement and a tilting motion on their pivotal connection with the said cross bar G, substantially as set forth.

2. In a rail brake for cars, the combination of vertical brake beams connected between their ends to a cross bar, a lever I operatively connected at one end with the said brake beams to actuate the same substantially in

the manner set forth, a vertical bar J having connection with the opposite end of the said lever and adapted to have the power applied thereto, and a spring applied directly to the
5 said bar J to normally hold the brake mechanism out of operative engagement with the rail, substantially as set forth.

3. In a rail brake for cars, the combination
of guides D and E, a vertical bar H mounted
10 on the said guides, vertical brake beams F connected between their ends by cross bar G,

links *h* connecting the bar H with the brake beams a lever I, a vertical bar J connected with the said lever I and a spring applied to the said bar J, substantially as set forth. 15

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

EDWIN TENISON WILSON.

Witnesses:

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