

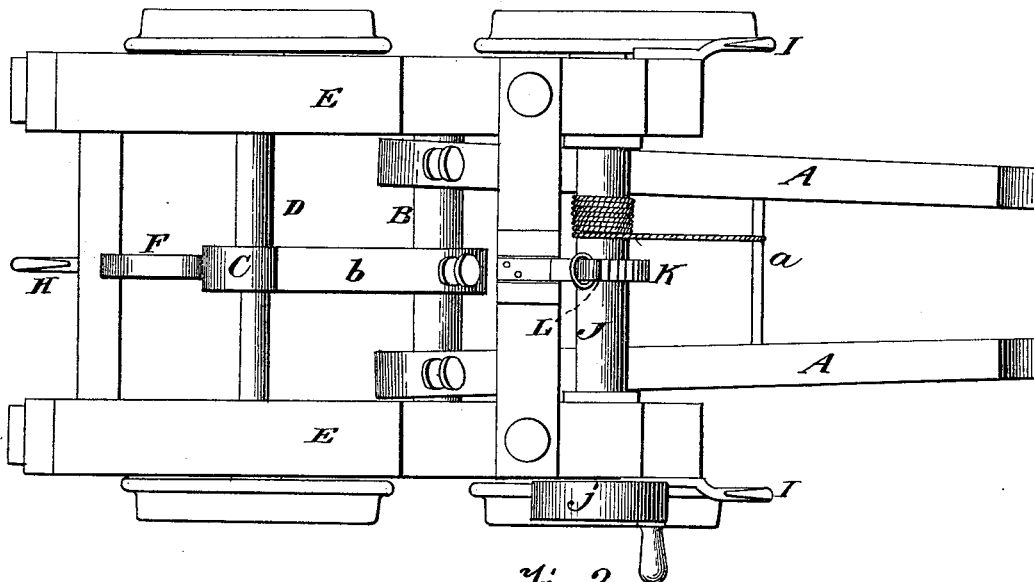
(No Model.)

T. TAIT.  
AUTOMATIC CAR BRAKE.

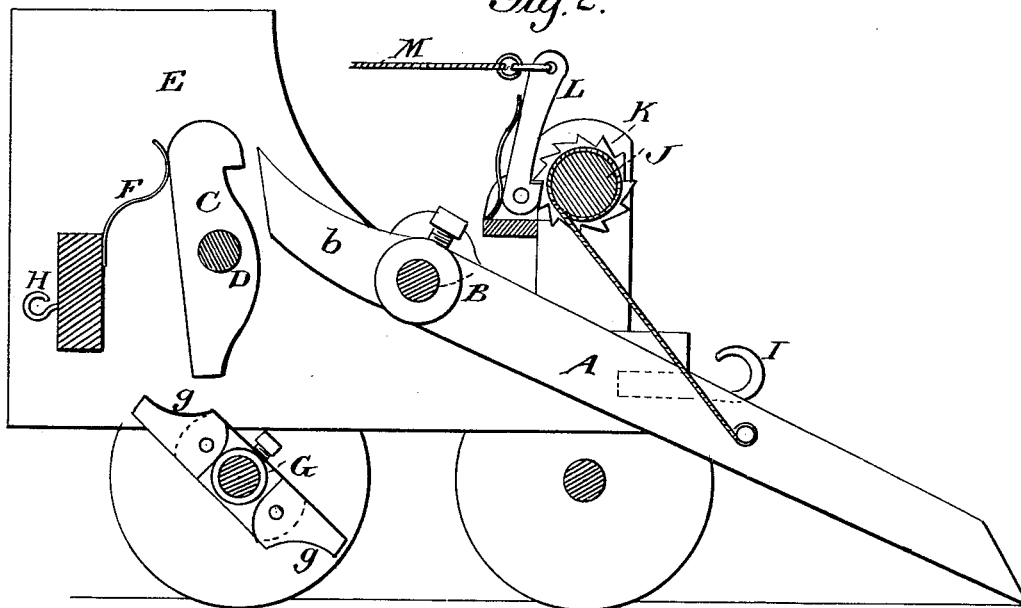
No. 387,019.

Patented July 31, 1888.

*Fig. 1.*



*Fig. 2.*



*Witnesses.*  
*A. Ruppert,*  
*H. A. Daniels.*

*Inventor.*  
*Thomas Tait.*  
*Per Thomas P. Carpenter*  
*att'y.*

# UNITED STATES PATENT OFFICE.

THOMAS TAIT, OF DUBOIS, PENNSYLVANIA.

## AUTOMATIC CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 387,019, dated July 31, 1888.

Application filed December 13, 1887. Serial No. 257,816. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS TAIT, a citizen of the United States, residing at Dubois, in the county of Clearfield and State of Pennsylvania, have invented certain new and useful Improvements in Automatic Car-Brakes; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification. The special object of the invention is to make an automatic brake for cars so that it will operate, as hereinafter fully described, on an incline or a horizontal plane.

Figure 1 of the drawings is a plan view; Fig. 2, a longitudinal vertical section.

In the drawings, A A represent two pivoted bars extending out from one end of the car, downwardly-beveled on their front ends to bite on the road-bed, and spaced by a tie-rod, *a*. At the inner ends they are fast to a vibratory shaft, B, to which an arm, *b*, is rigidly attached and subadjacently beveled to fit into the notch *c* of the trigger C, which turns on a fixed pivot, D, between the side frames, E E. The arm *b* and trigger C are held locked together by the spring F until one of the axle-arms *g g* of axle G strikes the lower end. This occurs in going uphill if the coupling should break and the car start to go backward downhill; but the arms *g* are jointed so as to fold over and pass the trigger without touching it when the loaded car is going forward.

H is a front hook, which may be used for draft purposes, and I I are rear hooks, by which the car or carriage may be drawn backward.

I connect the spacer-rod *a* with the windlass J, having the hand-crank *j* and the ratchet-wheel K, so that the bars A A may be raised and then held up by the detent L. To the upper end of the detent I attach a rope, M, so that the bars may be unlocked by a pull and remain only held by the trigger. When locked and out of use, the axle-arms *g g* are slipped to one side, so as to be out of gear with the trigger. Then the car or carriage may be drawn in either direction.

I am aware that Patent No. 216,407 describes a pivoted pole arranged on a car and combined with certain starting mechanism; but

What I claim as new, and desire to protect by Letters Patent, is—

1. The combination of the pivoted bars A A and shaft B, having arm *b*, with a trigger and axle-arms, as set forth.

2. The combination, with the trigger, of axle-arms adapted by means of a joint to pull the trigger only when the loaded car takes a backward movement.

3. The combination of the pivoted bars A A, having spacer *a*, the rope or chain, the windlass, the ratchet, and the detent, as and for the purpose specified.

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

THOMAS TAIT.

Witnesses:

W. C. PENTZ,  
P. CULLEN.