

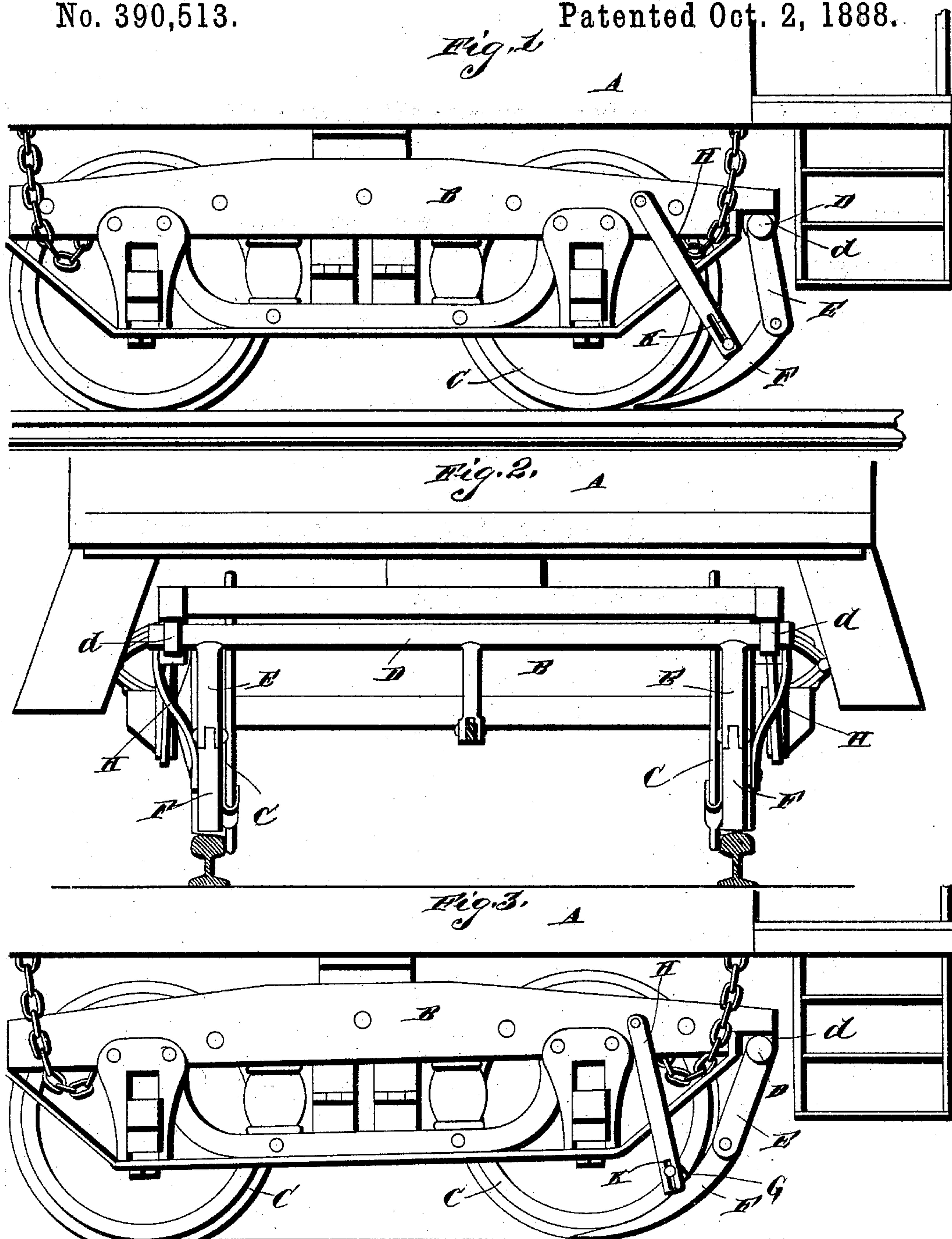
(No Model.)

H. OTENHOUSE.

CAR BRAKE.

No. 390,513.

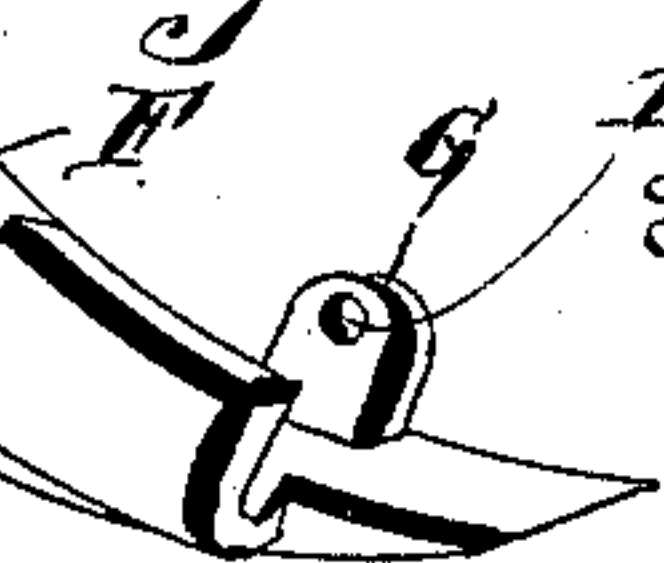
Patented Oct. 2, 1888.



Witnesses

*C. E. Doyle*

*Fig. 4.*



By *his* Attorneys

*H. Ottenhouse*

*C. H. Snowden*



# UNITED STATES PATENT OFFICE.

HENRY OTENHOUSE, OF MCKINNEY, TEXAS.

## CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 390,513, dated October 2, 1888.

Application filed June 5, 1888. Serial No. 276,117. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY OTENHOUSE, a citizen of the United States, residing at McKinney, in the county of Collin and State of Texas, have invented a new and useful Improvement in Car-Brakes, of which the following is a specification.

My invention relates to car-brakes, and it has for its object to provide improved means for operating the brake, and also to provide an improved arrangement of parts, whereby the device is rendered certain in its operation and is enabled to resist the strain which comes upon it.

The invention consists in a certain novel construction and arrangement of devices, fully set forth hereinafter, and claimed in connection with the accompanying drawings, wherein—

Figure 1 is a side view of a portion of a car provided with the brake. Fig. 2 is a front view of the same. Fig. 3 is a side view showing the wheel locked by the brake. Fig. 4 is a detail perspective view of the brake-shoe.

Referring to the drawings, A designates a portion of the car-body, and B designates the front portion of a truck on which the wheels C are mounted.

D represents a transverse rock shaft mounted in stirrups *d d* on the under side of the truck, and to this shaft are attached the depending arms E E, opposite the edges of the wheels, respectively.

The brake-shoes F are pivoted to the lower ends of the arms E, and they are curved to fit the peripheries of the wheels, (covering both the body and the flange,) and are tapered in thickness from their upper to their lower ends.

Upwardly-projecting ears G G are formed on opposite sides of the shoes, and swinging links H H are pivoted to the car-body at their upper ends, and to the said ears at their lower ends. The ears are provided with apertures I, which align with longitudinal slots K in the lower ends of the links, and the pivot-pins are arranged in the apertures and slide in the slots. When the brake is in the position shown in Figs. 1 and 2, the pivoted pins are in the lower ends of the slots; but when the

brake shoes pass under the wheels the pivot-pins pass up to the upper ends of the slots.

The operation of the brake will now be readily seen. The brake-shoes are normally held away from the wheels, and when there is a prospect of an accident by collision, broken bridge, or the like, the devices which detain the brakes are withdrawn and the latter swing down into the position shown in Fig. 2. The moment the edges of the shoes are engaged by the wheels the wheels are lifted from the track, when, having no further hold upon the track, the train will stop.

I propose to connect the improved safety-brake to the operating mechanism of the Westinghouse brake in such a manner that the latter will hold the brake-shoes away from the wheels; but the moment the car jumps the track, or any accident happens whereby the connections are broken, the brakes will be applied. The brake may also be operated in any ordinary or preferred manner by the engineer or train-hands.

Having thus described the invention, I claim—

1. In a brake, the combination of the swinging arms E, arranged in front of the wheels, the curved brake-shoes pivoted at their front ends to the lower ends of the arms E, and the swinging slotted links H, connecting intermediate points of the brake-shoes to a stationary part of the car, whereby the free end of the shoe is capable of a swinging movement independent of the links, substantially as described.

2. In a car-brake, the combination, with the swinging arms E, of the shoes pivoted to the said arms and having the ears provided with apertures I, the swinging links H, having slots in their lower ends aligned with the apertures I, and the pivot-pins engaging the apertures and slots, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HENRY OTENHOUSE.

Witnesses:

W. M. BAGLEY,  
J. M. HERNDON.