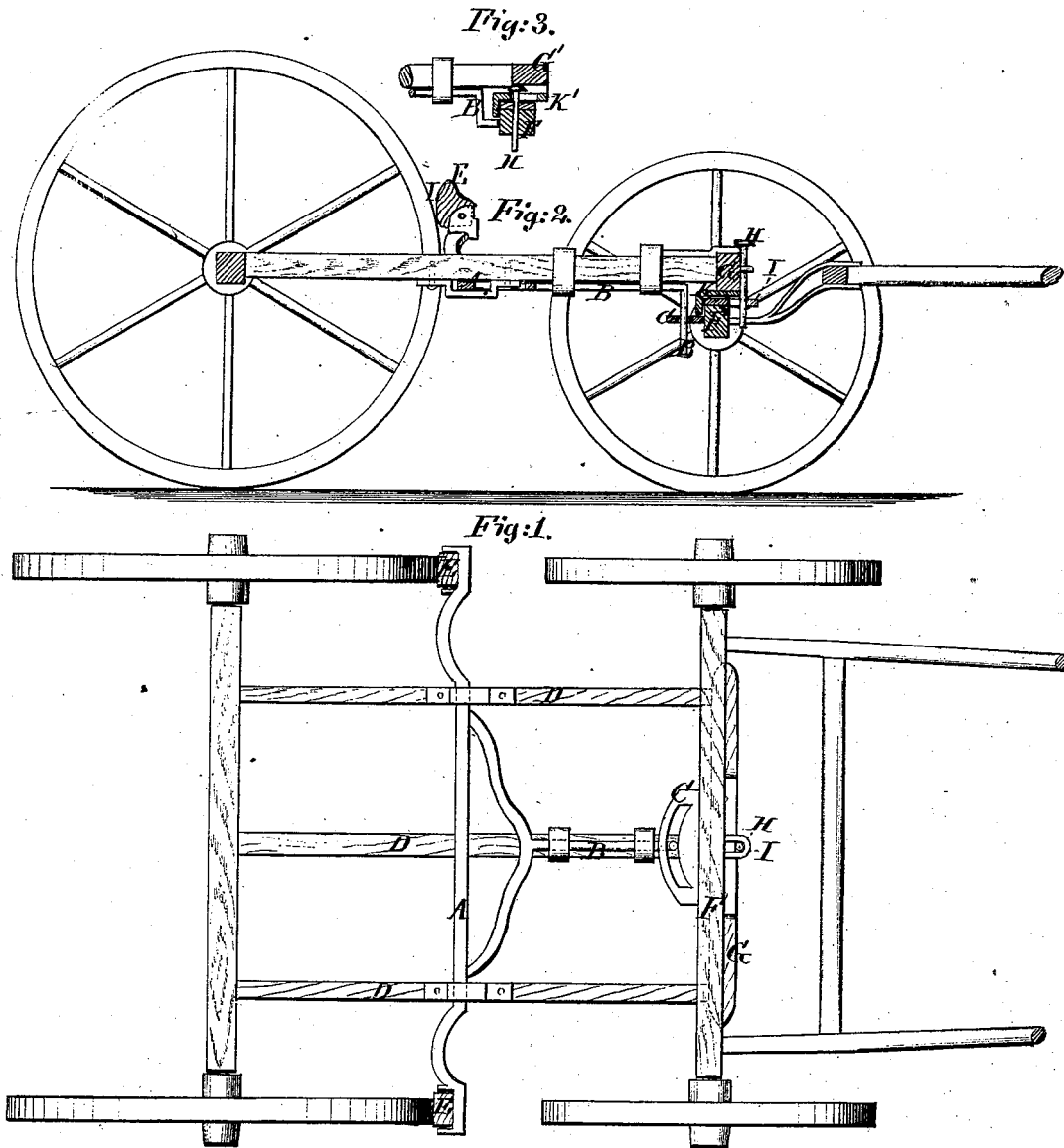


H. B. S. DAVIS.  
Carriage Brake.

No. 107,462.

Patented Sept. 20, 1870.



Witnesses:  
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# United States Patent Office.

HIRAM B. S. DAVIS, OF FARMINGTON, MAINE.

*Letters Patent No. 107,462, dated September 20, 1870.*

## IMPROVEMENT IN CARRIAGE-BRAKES.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, HIRAM B. S. DAVIS, of Farmington, in the county of Franklin and State of Maine, have invented a new and improved Carriage-Brake; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

My invention relates to carriage-brakes, and my object is to effect an improved combination of the parts operating in connection with the brake-bar.

Figure 1 is a plan view of the running part of a wagon provided with my improved brake;

Figure 2 is a longitudinal sectional elevation of the same; and

Figure 3 is a modified arrangement, adapted to lighter carriages.

Similar letters of reference indicate corresponding parts.

A represents the brake-shoe supporting-bar, and

B, a tongue or bar attached thereto, and extending nearly to the front axle, and then down through a slotted plate, C.

These bars, A and B, are arranged on the frames or bars D to slide back and forth a short distance, to move the brake-shoes E against the hind wheels or away from them.

For moving them, the front axle F, to which the curved plate is attached, is allowed to move back and forth under the bolster G, the king-bolt H being arranged in a slotted plate, I, projecting forward of the axle, and attached thereto to admit of such movement, the same being effected by the action of the

animals in holding back in going down hill, or pulling ahead when not going down hill.

K is a small plate, attached to the under side of the bolster, and arranged to arrest the backward movement of the axle.

The brake-shoes, E, are made eccentric to the pivots on the working faces L, to increase the pressing as they are rolled down by the friction of the faces of the wheels of the wagon, and thereby bind more effectively, with the same amount of sliding movement, than would be the case if made concave and dependent wholly on the movement of the bar A toward the wheels for their resistance.

In fig. 3 I have shown a modified arrangement of the axle-bolster and king-bolt, adapted for light carriages, in which the slotted plate I is dispensed with, and a slot is made on the angle-plate K', also a groove in the under side of the rocker G', and the king-bolt passes through the axle in the usual way.

The axle strikes against the end of the bar B and forces it back, where it may be left, to be moved forward again to relieve the wheels by the action of the latter thereon, or the bar may be connected to the axle in any suitable way to be drawn forward.

Having thus described my invention,

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

The combination, with bolster, sliding front axle, and king-bolt, of the angle-plate K, and slotted plates C I, relatively arranged as described, to regulate the backward and forward throw of the axle.

Witnesses: HIRAM B. S. DAVIS.

JAMES M. CHILDS,  
A. L. TALBOT.