

# LATCHER & POWELL.

Car Brake.

No. 45,617.

Patented Dec. 27, 1864.

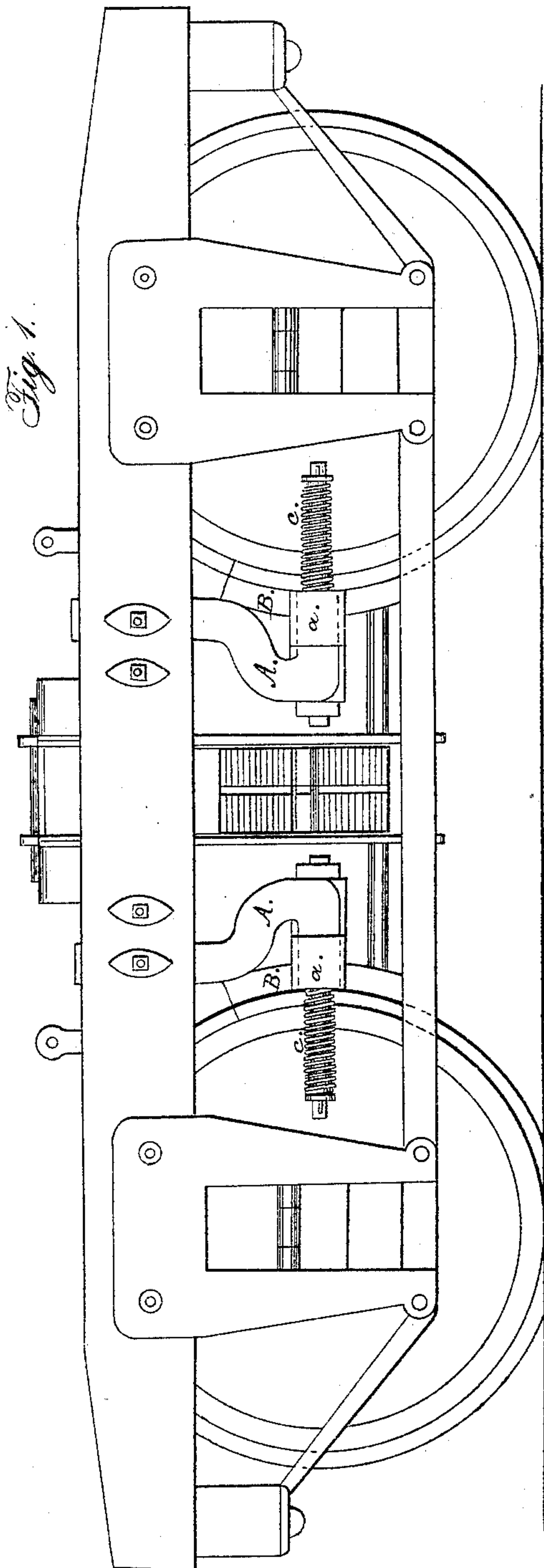


Fig. 3.

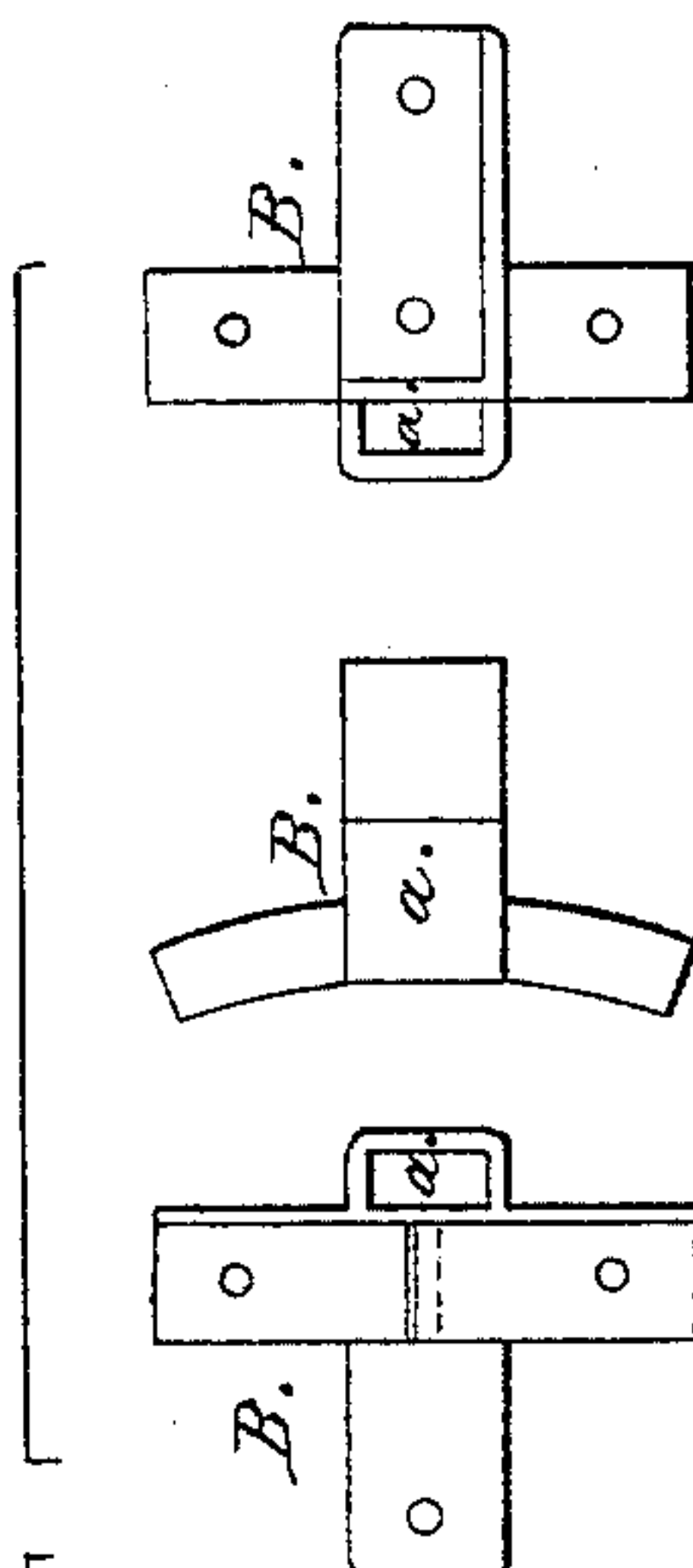


Fig. 2.

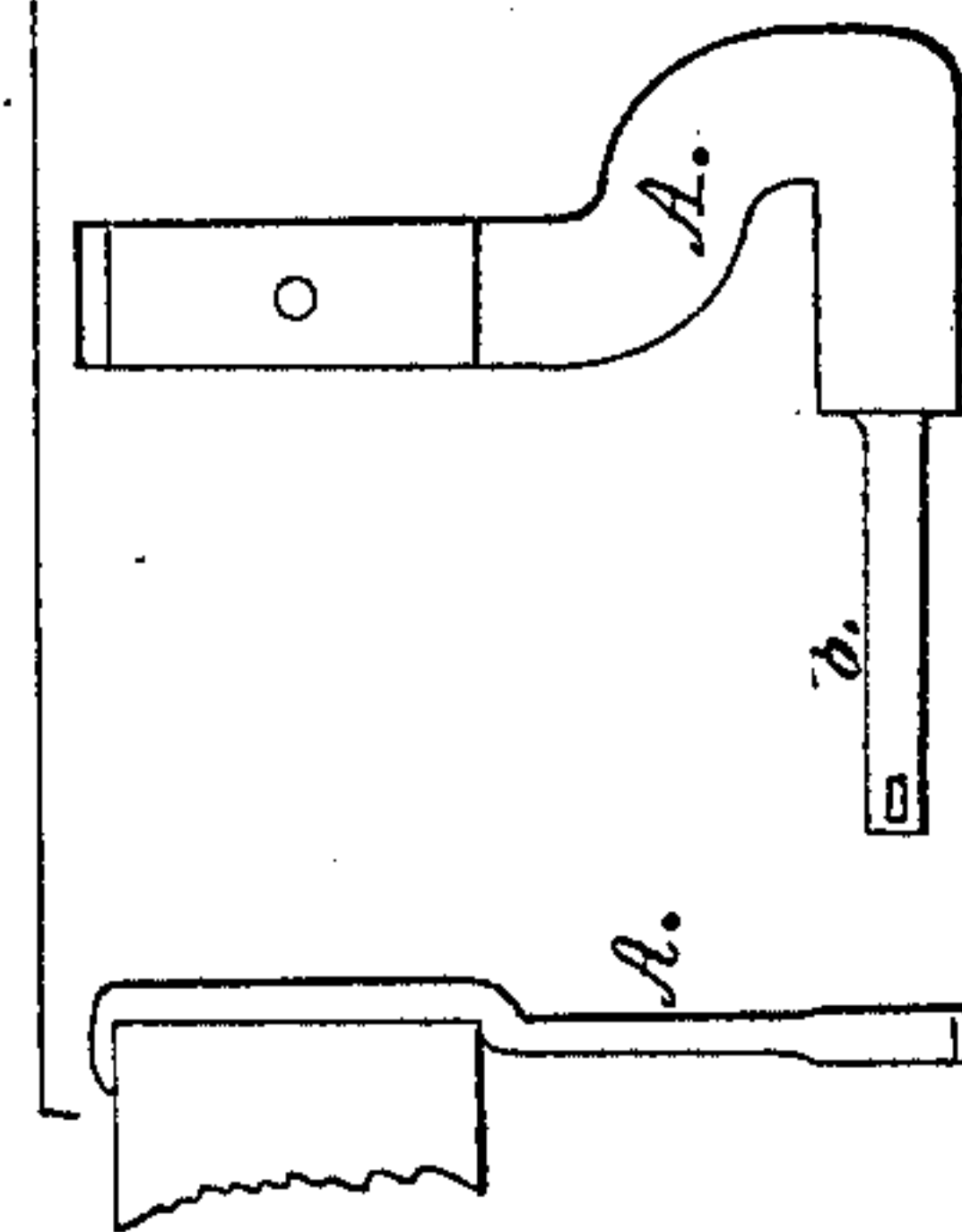


Fig. 5.

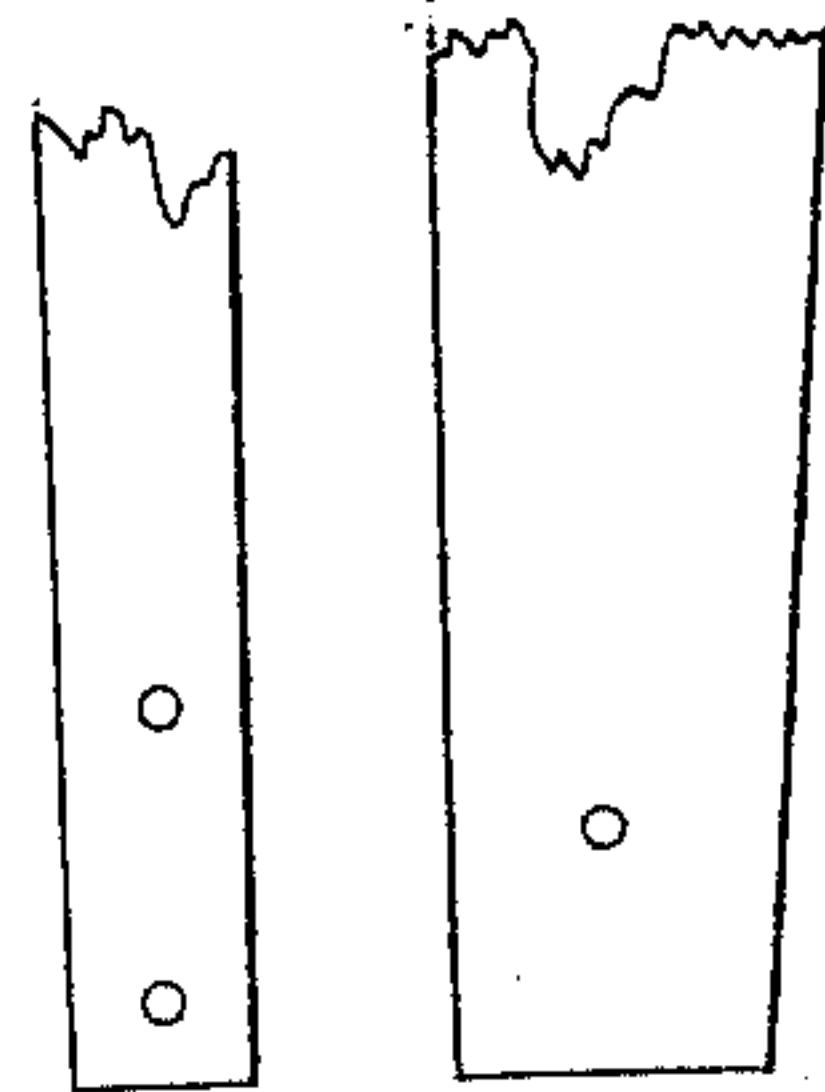


Fig. 4.

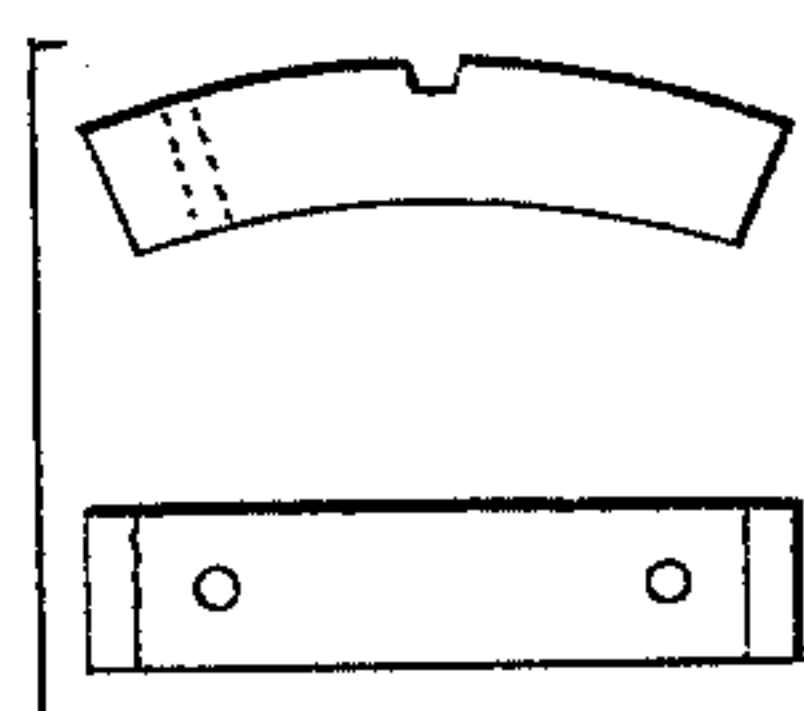


Fig. 6.



Witnesses:

{ S. B. Hoffman  
{ J. J. Bury Parks

Inventor:

J. W. Latcher & Wm. J. Powell.

# UNITED STATES PATENT OFFICE.

RECORDED

JOHN W. LATCHER AND WILLIAM J. POWELL, OF AMSTERDAM, NEW YORK.

## IMPROVEMENT IN CAR-BRAKES.

Specification forming part of Letters Patent No. 45,617, dated December 27, 1864.

*To all whom it may concern:*

Be it known that we, JOHN W. LATCHER and WILLIAM J. POWELL, of Amsterdam, county of Montgomery, and State of New York, have invented a new and useful Improvement in Railroad Car Brakes; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 exhibits a side elevation of a car-truck, showing the manner in which the brake-shoes are sustained in their proper position. Fig. 2 is different views of the sustaining-bracket; Fig. 3, the shoe-case; Fig. 4, shoe made of wood or iron, to be replaced when much worn. Fig. 5 are views of the brake-beams; Fig. 6, spiral spring, &c., which throws the shoe back from the wheels when the power is removed from the brake.

The object of this improvement is to secure greater safety by the arrangement of suspending the brakes on substantial brackets or guides, so as to admit of the sliding or reciprocating motion of the brakes, and at the same time answering the purpose of preventing the brakes from falling upon the track in case some of its other parts should give out.

A represents the bracket, which has a suitable bearing or guideway for the brake B to slide over it through the mortise *a*. The said

mortise or loop may be formed separately and then secured to the brake by means of bolts, &c.; but we prefer this way, as there is no joint to get loose by the jar and strain on the shoes.

The spiral spring, Fig. 6, is placed on the round stem *b* of the bracket A, and presses against the brake B so as to force it back from the wheel, as shown in Fig. 1 at *c*.

The object attained by means of bracket or guide A, brake B, mortise *a*, stem *b*, and spring *c* is to have the brake-shoes *d* recede from the wheels uniformly when the power is removed.

The guides A are secured to beam, Fig. 5, by means of bolts, &c., as represented.

The shoes, Fig. 4, can be replaced whenever much worn.

What we claim as our improvement, and desire to secure by Letters Patent, is—

1. The arrangement of suspending or hanging brakes by means of ways or guides in the manner substantially as shown and described, and for the purpose specified.

2. In combination with the stationary guide A, brake B, rod or stem *b*, and spring *c*, operating as set forth.

J. W. LATCHER.  
W. J. POWELL.

Witnesses:

S. B. HOFFMAN,  
J. G. BIRNEY PARKS.