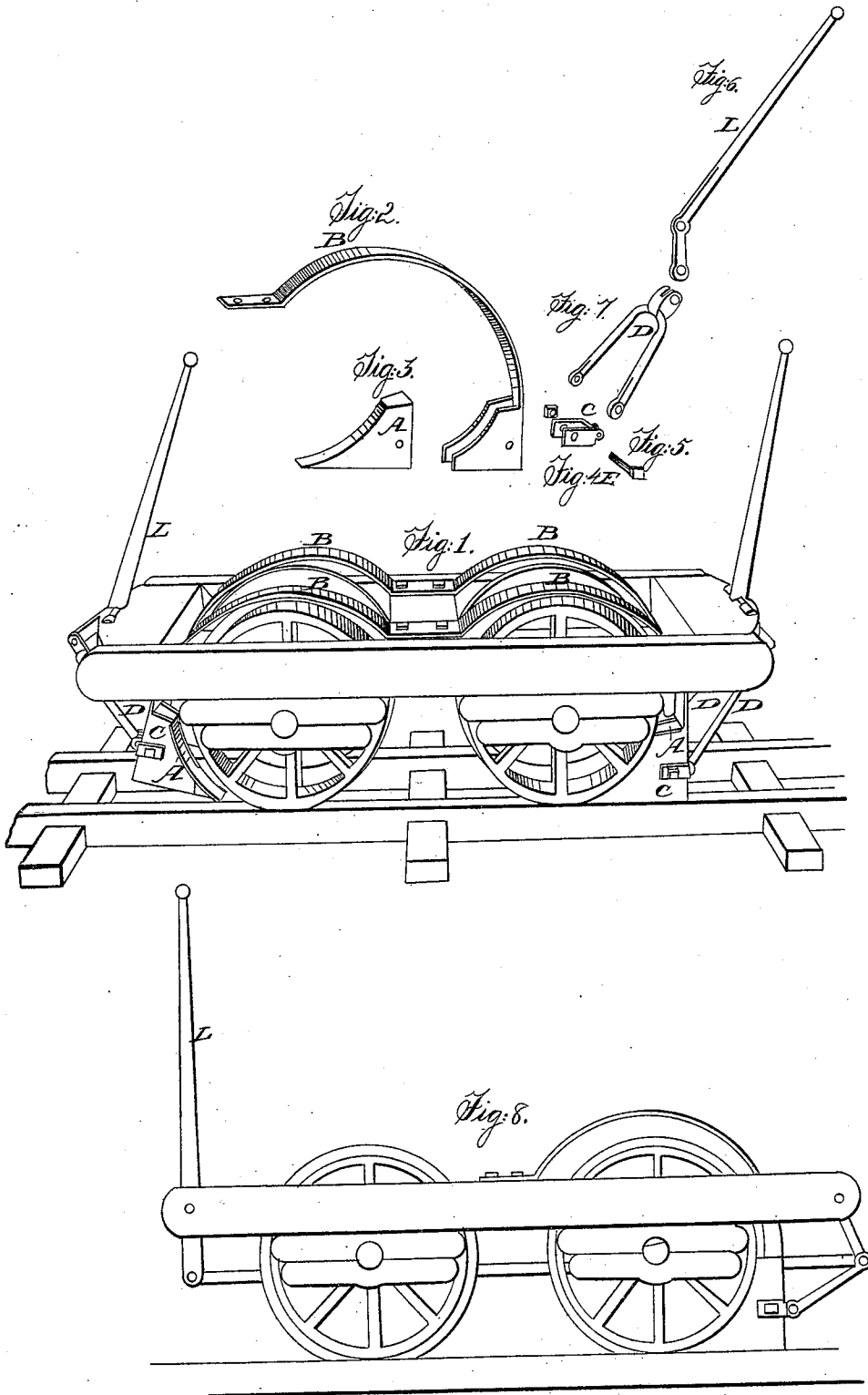


P. I. O'CONWAY.

Car Brake.

No. 1,777.

Patented Sept. 10, 1840.



# UNITED STATES PATENT OFFICE.

PETRUS I. O'CONWAY, OF PHILADELPHIA, PENNSYLVANIA.

## BRAKE FOR RAILROAD-CARRIAGES.

Specification of Letters Patent No. 1,777, dated September 10, 1840.

*To all whom it may concern:*

Be it known that I, PETRUS I. O'CONWAY, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Brakes for Stopping Railroad-Cars and all Kinds of Carriages, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a side view of the car and brake in which one of the brakes is represented in use and the other not in use; Fig. 2, curved bar and box; Fig. 3, shoe; Fig. 4, clamp; Fig. 5, bolt; Fig. 6, lever; Fig. 7, connecting yoke rod; Fig. 8, locomotive and brake in which the lever must be drawn toward the engineer instead of being pushed from him in order to apply the brake.

Similar letters refer to similar parts in the figures.

This invention consists in constructing a shoe in a peculiar manner at the end of a curved bar of iron attached to the car, said bar encircling more than one third the circumference of the car wheel, the shoe when not in use being suspended near the circumference of the wheel and near the track in such a manner that it can be brought against them by the brakeman at any time by means of a lever and connecting rod attached to the shoe and to the car at the end or in any convenient part of it.

The shoe A is made of wood straight on the side next the curved bar to which it is suspended, straight on the side next the track, and concave on the side next the wheel, the concavity being a segment of the curvature of the wheel to which it is to be applied. The shoe is made wider at the top than at the bottom and also at the outer end to prevent its being pressed out of the box in which it is fastened at the end of the curved bar B. This box is formed by the lower sides of the bar being turned

at right angles so as to fit the sides of the shoe which is secured therein by a bolt E passed through the same and through a clamp C to which the connecting rod D of lever L is attached, which rod is so connected with the lever that in bearing the latter outward the shoe is brought immediately against the wheel and the point of the shoe touching the track the wheel runs on it pressing it against the track and arresting the car, the shoe acting as a wedge or chock. The lever is connected to the front part of the car, or in any convenient part of it by a suitable box fixed therein.

The spring bar should be of sufficient strength to hold the shoe in a suspended position above the track and in front of the wheel without touching either when the lever is at rest. The under side of the shoe may be covered with leather, india rubber, or any suitable material to prevent any jar when the shoe is brought suddenly against the track or ground.

A brake of the foregoing description may be applied to one, two or more of the wheels of the car as desired, singly, or in pairs, and when in pairs they should be connected together by a yoke rod to the middle of which, a single lever is attached by which the two brakes may be brought between the wheels and track simultaneously by bearing it out from the wheels.

I do not claim to be the inventor of a brake or drag in which the shoe presses against the road and the periphery of the wheel at the same time, this having been known and used before, but

I do claim as my invention—

Attaching the shoe to a spring bar in the manner and for the purpose specified.

PETRUS I. O'CONWAY.

Witnesses:

JOHN QUINN,  
E. SLANES.