

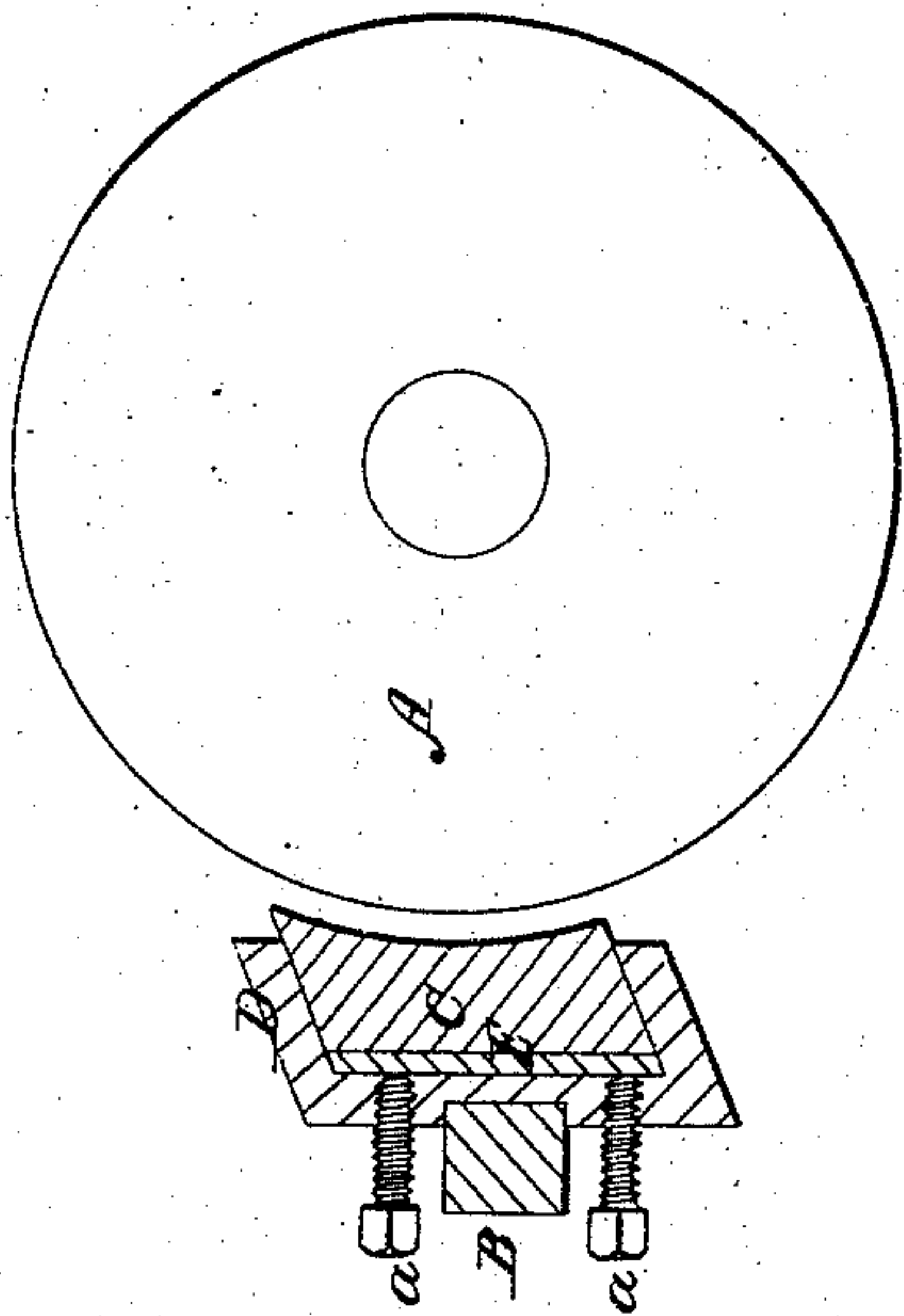
*J. H. Champlin.*

*Brake Shoe.*

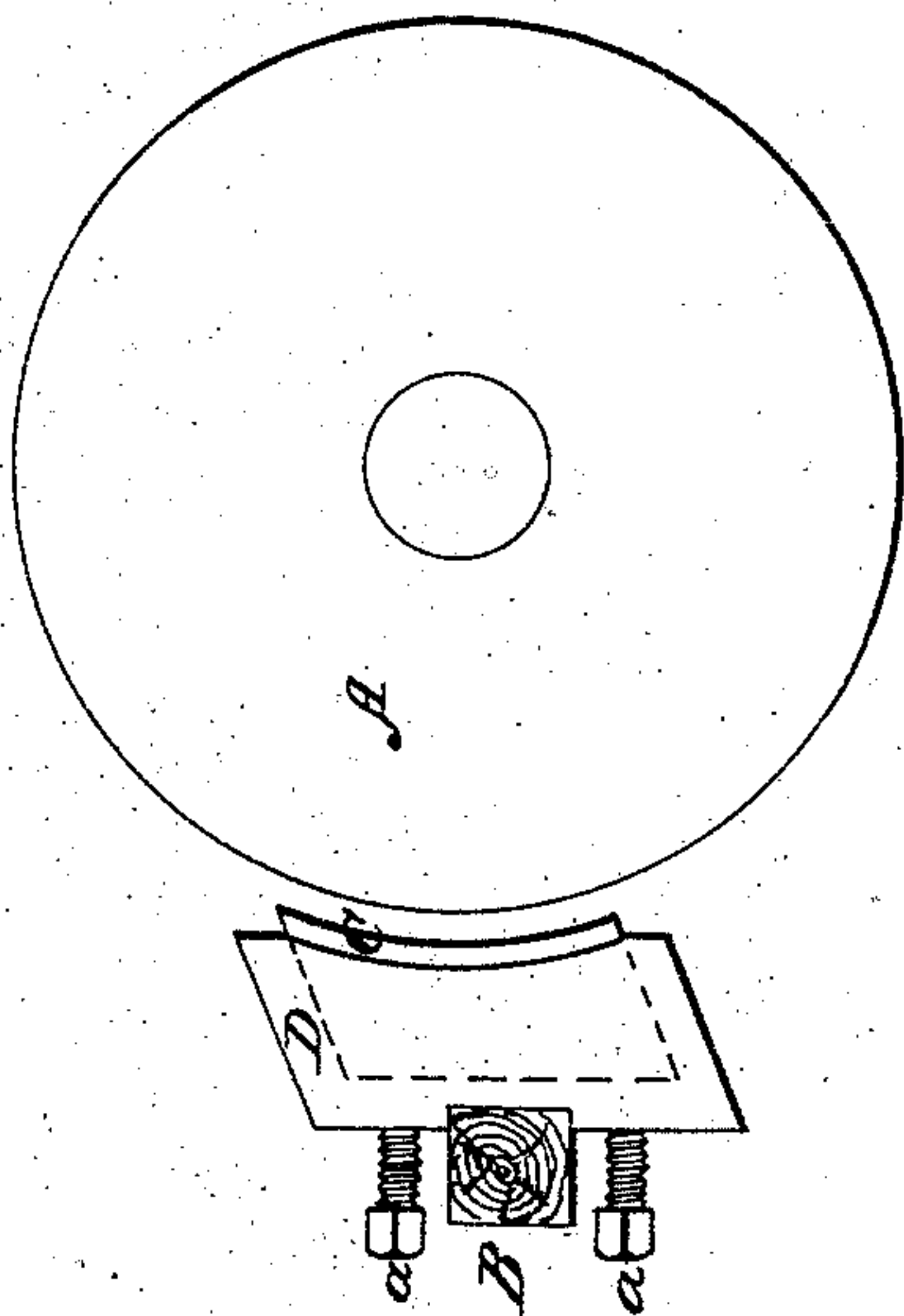
*N<sup>o</sup> 45,975.*

*Patented Jan 24, 1865.*

*Fig. 2.*



*Fig. 1.*



*Witnesses,*

*Chas. N. Jacobs*

*Rufus Sanford*

*Inventor,*  
*J. H. Champlin,*  
*per*

*John E. Eule,*  
*att'y.*

# UNITED STATES PATENT OFFICE.

J. H. CHAMPLIN, OF ESSEX, CONNECTICUT.

## IMPROVEMENT IN RAILROAD-CAR BRAKES.

Specification forming part of Letters Patent No. 45,975, dated January 24, 1865.

*To all whom it may concern:*

Be it known that I, J. H. CHAMPLIN, of Essex, in the county of Middlesex and State of Connecticut, have invented a new and useful Improvement in Brakes for Railroad-Cars; and I do hereby declare the following to be a full, clear, and exact description of the same, when taken in connection with the accompanying drawings and the letters of reference marked thereon, and which said drawings constitute part of this specification, and represent, in—

Figure 1, an end view of my brake, and in Fig. 2 a vertical central section of the same.

My invention relates to that part of a railroad-car brake employed to create friction upon the wheel, and it consists in the employment of stone or other mineral substance in the construction of the friction-block.

To more fully illustrate my invention, I will proceed to fully describe the same in connection with the accompanying drawings.

A represents a common car-wheel; B, the beam of the brake, to which the friction-block is attached. C is a block of stone or other suitable mineral substance capable of producing great friction when applied to the surface of the wheel. I set the said block in a case or box, D, fixed to the beam B. The lower end of the said box I make inclined upward,

as seen in Fig. 2, to prevent the block from tipping forward, and set a plate, E, in the said box back of the block C, the block resting thereon and projecting a little from the box. By constant use the block will be worn away, then by means of the screws *a a* force the plate and block out a sufficient distance for further use, and so on until the block is nearly worn out.

My brake may be operated to bear against the wheel in any of the common ways. That is no part of my invention.

The principal advantages of my invention over ordinary friction-blocks are, a greatly-increased friction from the same amount of power applied, and the adjustment of the block as it wears away.

Having therefore described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

A friction-block for railroad-car brakes, formed from stone or its equivalent, combined with and made adjustable by means of the screws *a a* in the case D, and arranged to operate substantially in the manner and for the purpose specified.

J. H. CHAMPLIN

Witnesses:

JOHN E. EARLE,  
RUFUS SANFORD.