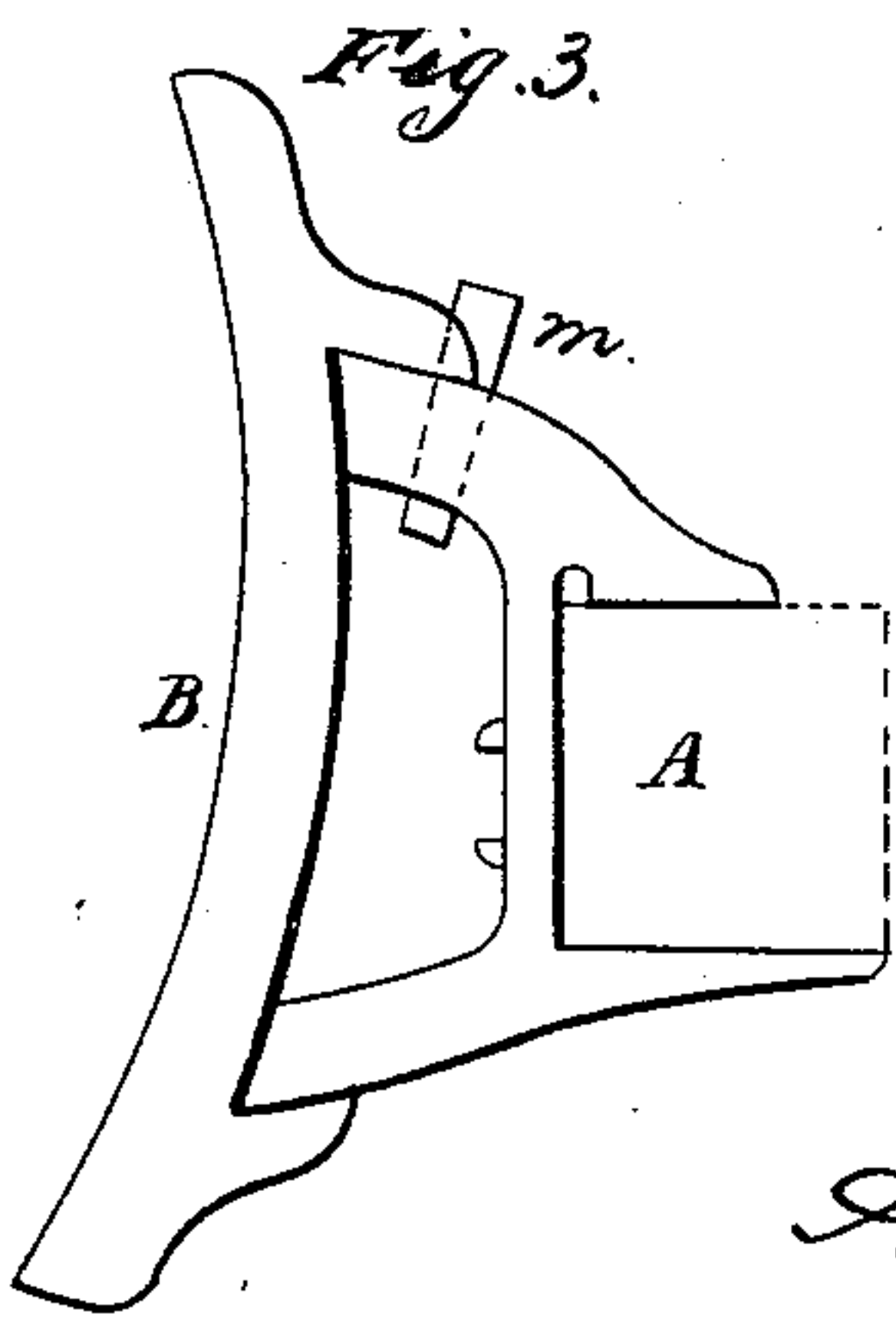
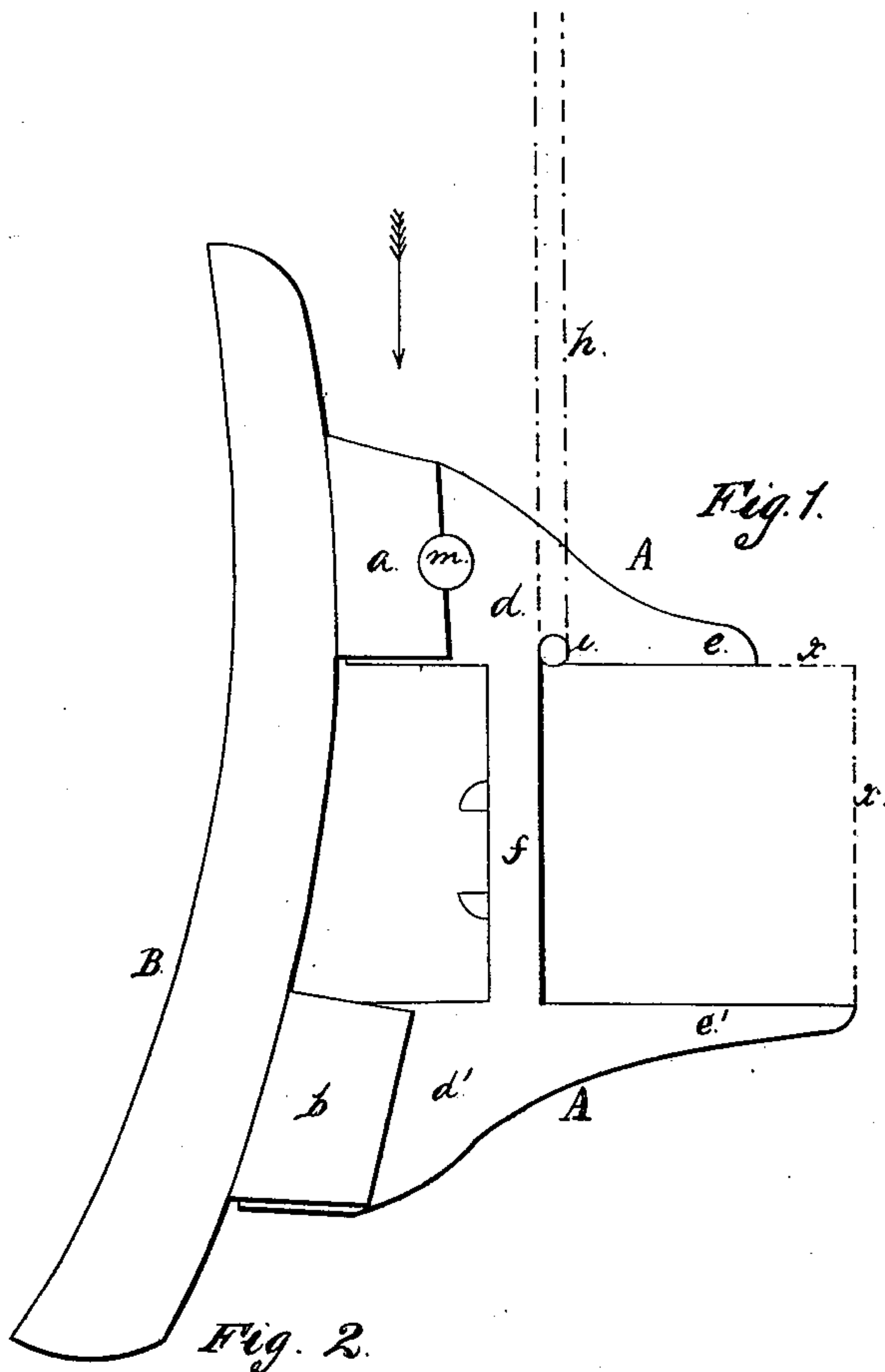


J. WOOD.
SHOE FOR CAR BRAKES.

No. 41,114.

Patented Jan. 5, 1864.



Witnesses.
Charles E. Foster.
H. Albert Steel.

Inventor:
Henry Howson
Atty for Joseph Wood

UNITED STATES PATENT OFFICE.

JOSEPH WOOD, OF RED BANK, NEW JERSEY.

IMPROVED SHOE FOR CAR-BRAKES.

Specification forming part of Letters Patent No. 41,114, dated January 5, 1864.

To all whom it may concern:

Be it known that I, JOSEPH WOOD, of Red Bank, Monmouth county, New Jersey, have invented an Improved Shoe for Railroad Car Brakes; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My improved shoe, which is fully described hereinafter, has been designed with a view of readily removing the sole when worn, and replacing it with a new one without disturbing the position of the shoe, a further object of my invention being the attainment of lightness and general simplicity in the construction of the shoe.

In order to enable others skilled in mechanism of this class to make and apply my invention, I will now proceed to describe the manner of constructing the same.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 is a side view of my improved shoe or rubber for railway-car brakes; Fig. 2, a rear view, and Fig. 3 represents a modification of my invention.

A is the shoe, and B the sole, the latter being on one side, adapted to the periphery of the car-wheel against which it has to bear, and having on the opposite side two upper lugs or projections *a a*, and two similar lower lugs or projections *b b*. Between the two upper lugs, *a a*, is a dovetailed space for the reception of the dovetailed projection *d* on the shoe A, there being a similar space between the lower lugs, *b b*, for the reception of a dovetailed projection, *d'*, on the lower portion of the shoe. Two flanges, *e* and *e'*, project from the shoe, and with the portion *f* of the latter form a recess for the reception of one end of the brake-beam, which is shown by the dotted lines *x*. The clevis *h*, by means of which the shoe is suspended to the car-truck, and which is shown by dotted lines, rests in a recess, *i*. A taper-pin, *m*, or its equivalent passes through a portion of both of the upper lugs, *a*, of the sole and through the dovetailed projection *d* of the shoe. It should be understood that the upper dovetailed projection, *d*, is somewhat wider than the lower projection, *d'*; or, in other words, the two projections form, as it were, a divided wedge, so that when the sole is fitted

to the shoe by depressing the former in the direction of the arrow until the sole occupies its proper position in respect to the shoe the two parts will be wedged perfectly fast to each other, and in fact may be considered as secure as though both were cast in one piece, the pin *m* serving no other purpose than that of maintaining the two parts in this intimate and secure contact with each other. As the soles wear out it is important that they should be removed and replaced with others with as little trouble as possible, and without disturbing the position of the brake-beam and shoes A. This desirable end is attained by my invention. The shoe A is permanently attached to the brake-beam, and the brake-beam, with the shoes, is suspended to the car-truck independently of the soles, so that after withdrawing the pin *m* the sole is at liberty to be detached by simply raising it, and this without disturbing the shoe.

My improved shoe has the additional advantage of being light and simple in construction compared with shoes in ordinary use.

Fig. 3 illustrates a modification of my invention, in which the sole B is fitted to the shoe A by a lateral movement of the former toward the latter, the dovetailed joints being arranged horizontally instead of vertically, as in the former case, and the retaining-pin *m* being arranged in accordance with this change in the direction of the joints.

This modification will be readily understood from the drawing without further explanation.

I wish it to be understood that I do not desire to claim, broadly, making the shoes of railway-car brakes in two pieces, so that the sole may be detached; but I claim as my invention and desire to secure by Letters Patent—

The shoe A and sole B when one is so dovetailed to the other, and when they are so held together by a retaining pin or bolt, *m*, or its equivalent, that on withdrawing the same the sole can be readily detached from the shoe, as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH WOOD.

Witnesses:

HENRY HOWSON,
JOHN WHITE.