(No Model.)

M. Y. BALDWIN.

BRAKE SHOE.

No. 491,697. Patented Feb. 14, 1893.

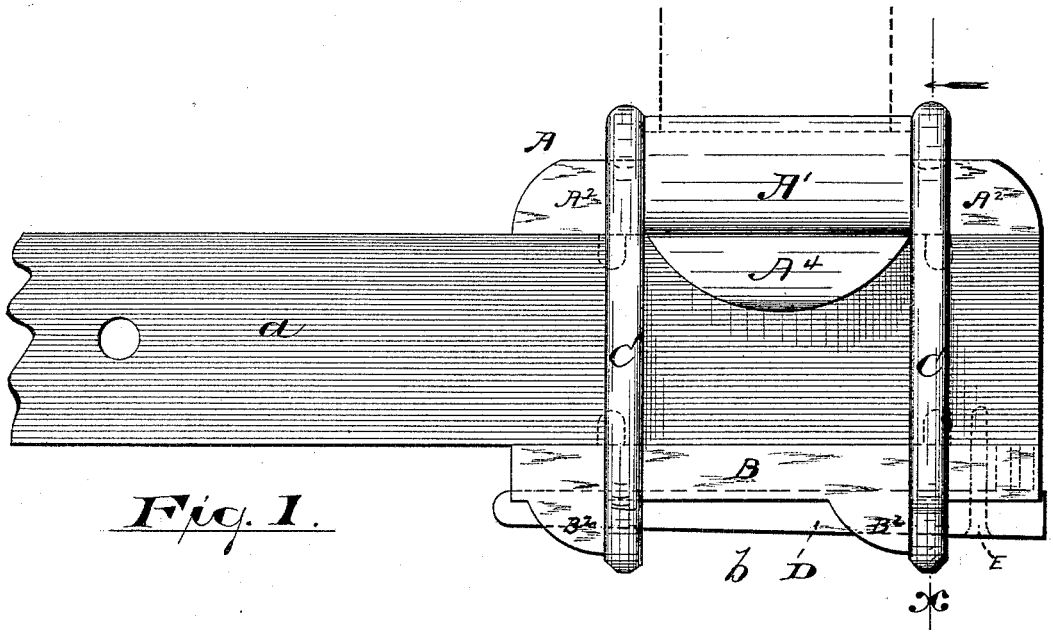

Fig. 1.

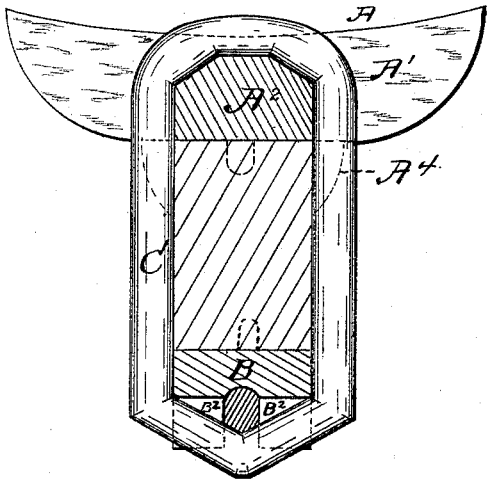

Fig. 2

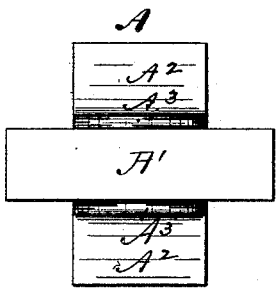

Fig. 3.

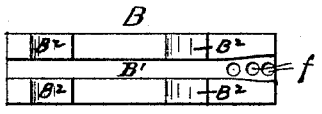

Fig. 4.

Witnesses

Oscar A. Michel.
Walter A. Gamble

Inventor:

Marcus Y. Baldwin,

By Drake & Co. Atty's.

UNITED STATES PATENT OFFICE.

MARCUS Y. BALDWIN, OF CALDWELL, NEW JERSEY.

BRAKE-SHOE.

SPECIFICATION forming part of Letters Patent No. 491,697, dated February 14, 1893.

Application filed May 6, 1892. Serial No. 432,102. (No model.)

To all whom it may concern:

Be it known that I, MARCUS Y. BALDWIN, a citizen of the United States, residing at Caldwell, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Brake-Shoes for Vehicles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to secure greater durability and immovability of the brake shoe, to enable the said shoe to be removed and replaced upon its carrier with greater facility, to reduce the cost of construction and to secure other advantages and results some of which will be referred to in connection with the descriptions of the working parts.

Referring to the accompanying drawings in which like letters indicate corresponding parts in each of the several figures, Figure 1 is a side elevation of the improved brake shoe arranged in connection with a portion of its carrier, Fig. 2 is a sectional view of the same taken on line *x*, Fig. 3 is a face view, on a reduced scale of the frictional portions of the said shoe and Fig. 4 is a face view of a plate adapted to be arranged on the side of the carrier opposite the said frictional portion.

In said drawings, *a* indicates the shoe carrier of the brake and *b* the shoe adapted to enter into frictional contact with the wheel periphery in the manner indicated in dotted outline in Fig. 1. The shoe consists of two clamping plates A, B, links C, C, and a wedge, D, adapted to be interposed between the links and one of said clamping plates to force the two said plates into holding relation to the bar or carrier *a*. The frictional plate, A, consists of a concaved portion A′ adapted to engage the wheel, ears A^2, A^2, having notches or recesses A^3 to receive the links, C, and lips, A^4, to engage the sides of the carrier and prevent lateral displacement when the braking pressure is brought to bear. The clamping plate, B, arranged on the opposite side of the carrier from the friction plate, A, is provided with a longitudinal wedge-way B′ and abutments or bearings B^2 against which the links rest when the wedge is driven to force the parts together. Said plate is provided with dowels on the side opposite the key-way adapted to enter recesses in the carrier to prevent lateral and longitudinal movement.

To prevent displacement of the wedge and the consequent loosening and disassembling of parts I have provided a key, such as a screw, E, adapted to pass through the wedge into the key holes, *f*, Fig. 4 as will be understood.

In assembling the parts in connection with the carrier, the two plates A and B are placed on opposite sides of the carrier, the links are placed on opposite sides of the friction surface into proper relation with its bearings, the wedge, D, inserted through the links, in its keyway, and driven home by a suitable implement to bring the plates into firm and secure relation to the carrier. The said wedge is then keyed by the means described or in any other suitable manner and the brake-shoe is thus ready to engage the wheel of the vehicle and operate to impede movement thereof in the ordinary manner.

Having thus described the invention what I claim as new is:—

1. The improved brake shoe herein described, consisting of clamping plates, links and a wedge adapted to be inserted between said links and one of said plates, substantially as set forth.

2. The combination with the carrier *a*, of a brake-shoe, comprising a concave plate, A′, having recessed ears, A^2, A^2, and lips, A^4, a plate, B, having abutments, B^2, and links, C, C, bearing on said ears and abutments and a wedge D, all said parts being arranged and operating substantially as set forth.

3. The combination with the carrier, of a brake-shoe having a friction surface to engage the wheel and bearings on opposite sides of said friction surface to receive links, said links and a wedge, all arranged and combined substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of April, 1892.

MARCUS Y. BALDWIN.

Witnesses:

CHARLES H. PELL,

OSCAR A. MICHEL.