(No Model.)

H. A. BANNING.

CAR BRAKE SHOE.

No. 274,896. Patented Apr. 3, 1883.

Fig. 1.

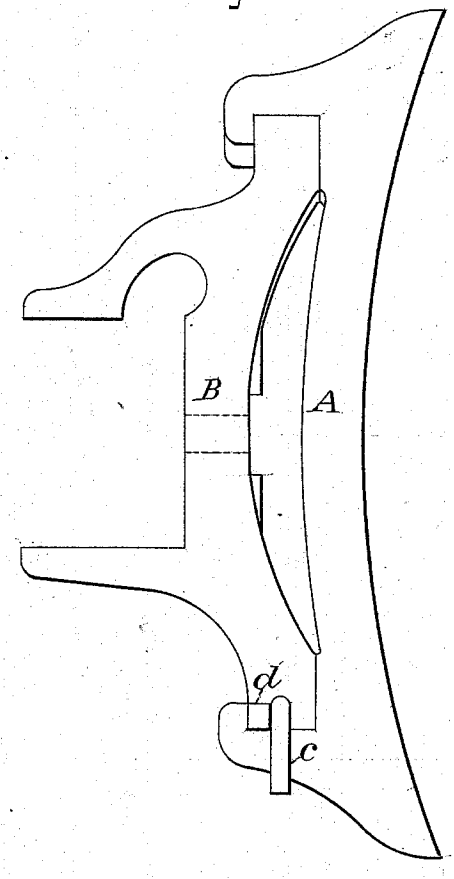
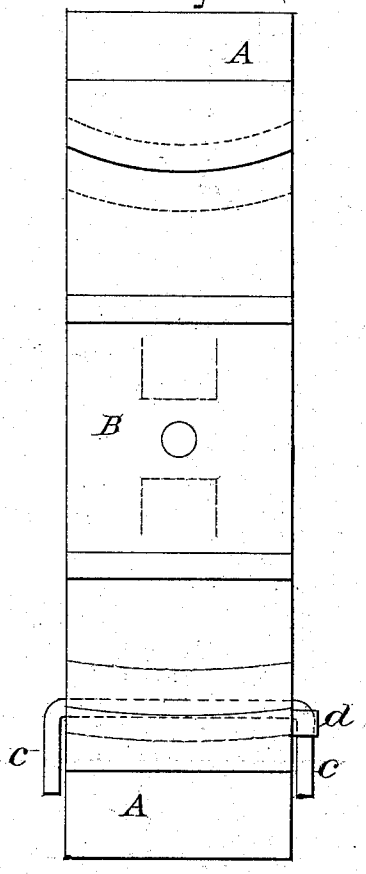


Fig. 2.



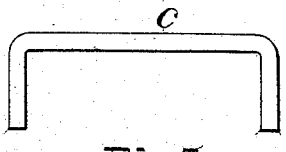


Fig. 3.

ATTEST:

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HUBERT A. BANNING, OF NEW YORK, N. Y.

CAR-BRAKE SHOE.

SPECIFICATION forming part of Letters Patent No. 274,896, dated April 3, 1883.

Application filed February 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, HUBERT A. BANNING, of the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Car-Brake Shoes, of which the following is such a full, clear, and exact description as will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

In the drawings, Figure 1 is a side elevation of the brake-shoe and brake-head with the fastening in its usual position. Fig. 2 is a plan view of the same, and Fig. 3 shows the form of the fastening.

My present improvements are designed to accomplish two objects, the first and principal of which is to make a brake shoe and head of simple construction, having in connection therewith a cheap and permanent fastening; and, second, to provide means for keeping the fastening out of the way while the shoe is being changed, as well as to prevent it from swinging back off the shoe while the cars are in motion.

My invention therefore consists of two separate combinations: first, the combination of the shoe, the head, and the fastening; and, second, the combination of the fastening and the head, having the lug or lugs thereon, as hereinafter described.

Heretofore brake shoes and heads have been held or secured together by the use of pins, keys, and bolts, which have to be removed and replaced whenever the shoes are changed, beside which such pins, keys, and bolts have to be fitted to suit the particular construction of the brake shoes and heads in connection with which they are used, and are also liable to be lost.

Aside from the fact that in my invention the shoe and head are of novel construction, being substantially the same as in my patent of January 30, 1883, the fastening, which is also an element of each combination, is permanent, and serves to retain the shoe firmly in its position on the brake-head, so as to prevent any sidewise swinging of the shoe and such consequent wear of the parts as might thereby be occasioned.

In the drawings, A represents the brake-shoe, and B the brake-head, or that part which is permanently fixed to the brake-beam. The upper and lower ends of the brake-head are curved in the same direction, so that one end is concave while the other is convex or segmental, the curves being parts of concentric circles. The brake-shoe has two lugs on its back side, which correspond respectively in position and curve with the curved ends of the brake-head. One of these lugs passes over and the other under the curved end surfaces of the brake-head with which they respectively correspond, thus securing the shoe to the head, and providing against the upward and downward strain when the brakes are applied. The fastening *c*, which retains the shoe in a fixed position and prevents sidewise swinging, consists of a rod of iron passed through a hole, which may be left in casting, in the segmental end of the brake head, and having both ends turned down, as shown in the drawings, its form being represented by Fig. 3.

When the brake-shoe is to be taken off for any purpose the fastening *c* is turned up until it passes back far enough to be clear of the sides of the shoe, which can then be removed directly from the side. In order, however, to prevent the fastening from dropping down before a new shoe can be put on, and thus necessitate its having to be again turned up, so as not to interfere with the shoe in its passage onto the brake-head, a small lug or lugs, *d*, may be cast on either side of the brake-head (preferably one on each side) at the back of and projecting below the hole through which the fastening *c* extends. The lug or lugs *d* form a convenient rest for the fastening, which can be turned up and back until it comes against them, where it will be out of the way in removing or replacing a shoe. The lug or lugs so disposed will also prevent the fastening *c* from swinging back off the brake-shoe should the motion of the cars be such as to cause it to have that tendency.

I do not here claim the particular construction of the brake-head and brake-shoe simply; but

What I do claim, and desire to secure by Letters Patent, is—

1. The brake-head B and shoe A, adapted to slide upon the curved surfaces thereof, in combination with the fastening or turnbuckle *c*, having two arms, substantially as described.

2. The turn-buckle *c*, having two arms, in combination with the brake-head B, having thereon the lug or lugs *d*, and curved surfaces, upon which the shoe A is adapted to slide, substantially as described.

HUBERT A. BANNING.

Witnesses:
J. E. TALBOT,
JOHN L. DOUGLASS.