

No. 726,339.

PATENTED APR. 28, 1903.

J. PLAYER.
BRAKE SHOE FOR RAILWAY BRAKES.

APPLICATION FILED FEB. 12, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

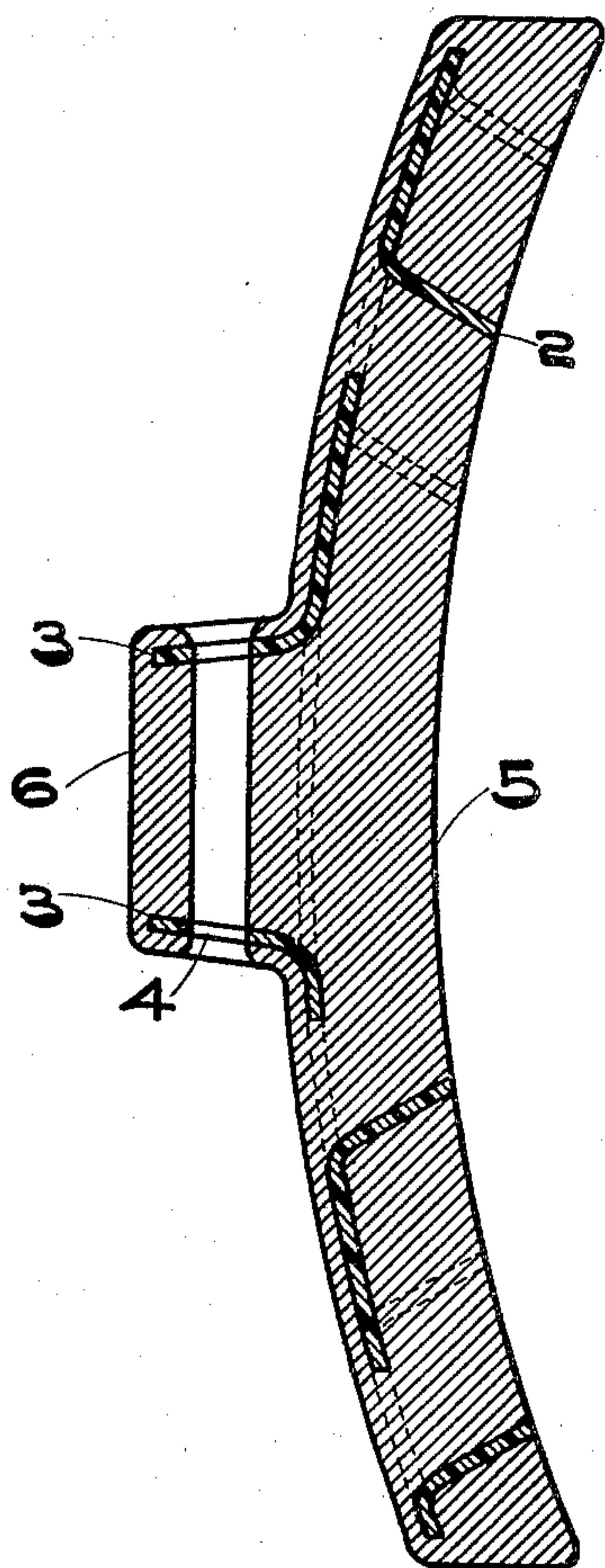


FIG. 2.

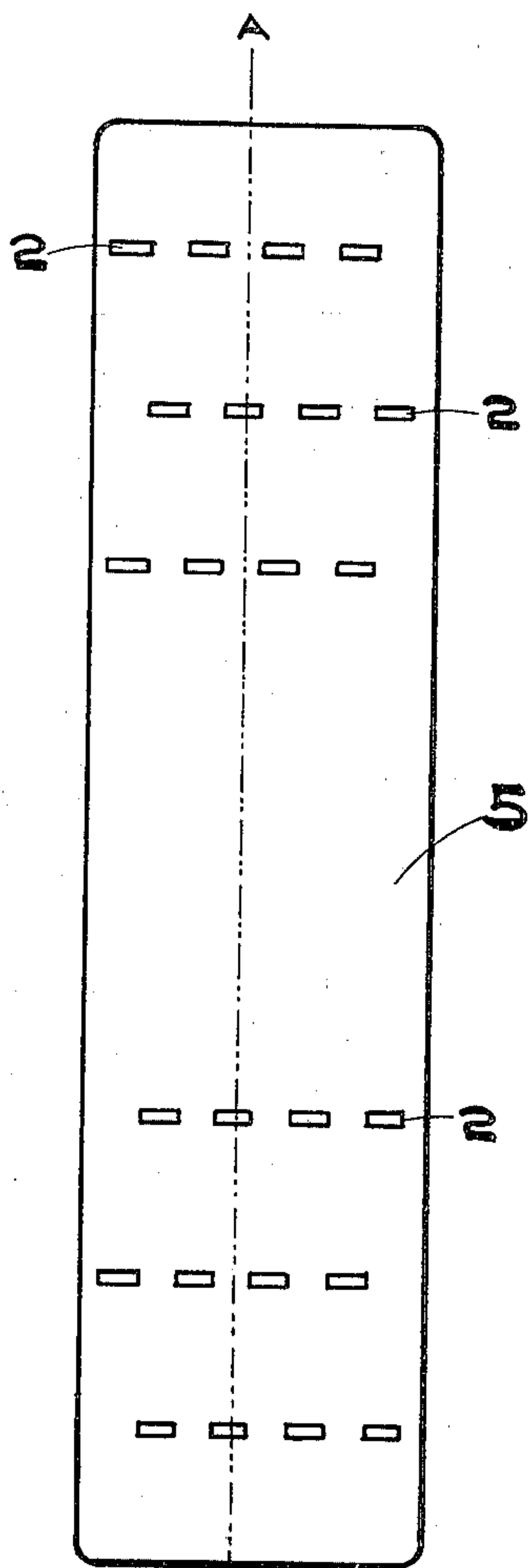


FIG. 1.

WITNESSES

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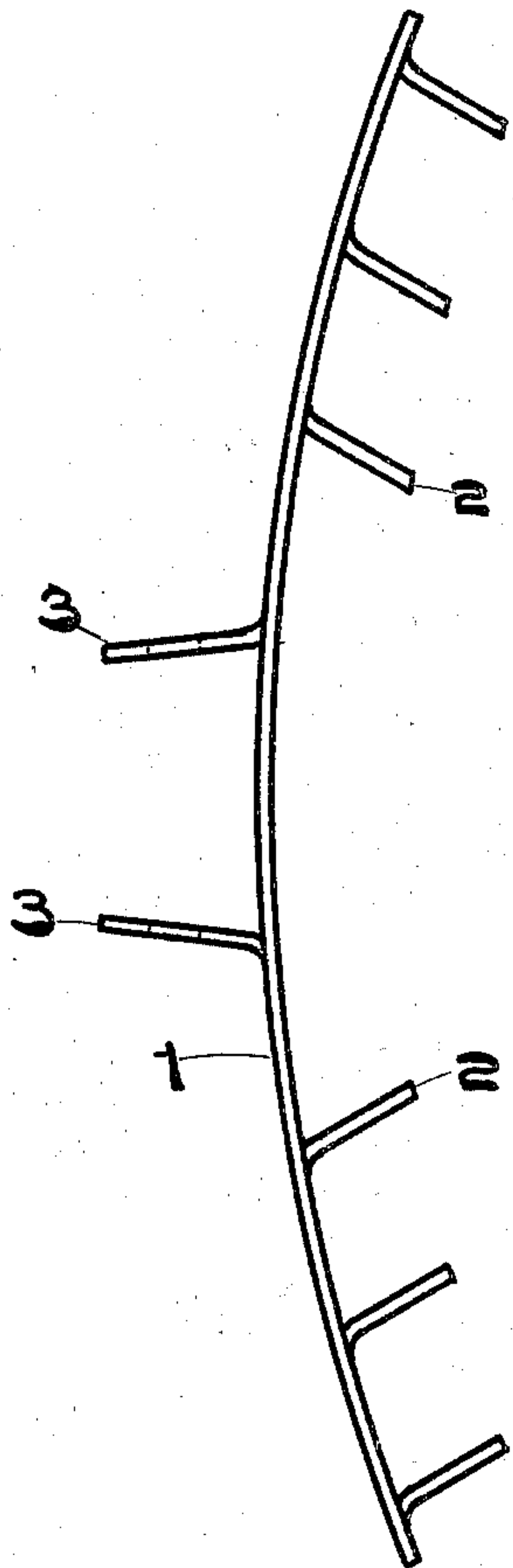


FIG. 4.

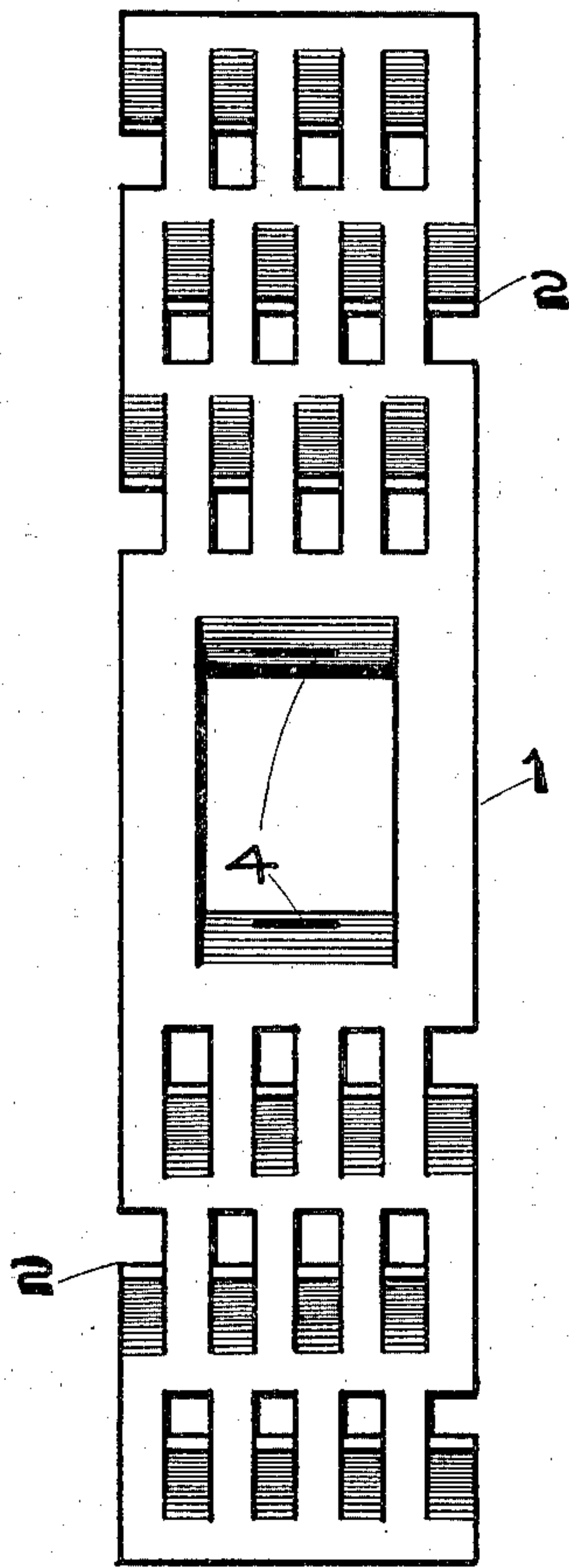


FIG. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN PLAYER, OF RIVER FOREST, ILLINOIS.

BRAKE-SHOE FOR RAILWAY-BRAKES.

SPECIFICATION forming part of Letters Patent No. 726,339, dated April 28, 1903.

Application filed February 12, 1903. Serial No. 143,128. (No model.)

To all whom it may concern:

Be it known that I, JOHN PLAYER, a citizen of the United States, residing at River Forest, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Brake-Shoes for Railway-Brakes, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in brake-shoes of the composite type for railway-brakes, the construction of which will be fully understood by a reference to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is an elevation of the face of a brake-shoe which embodies my invention. Fig. 2 is a longitudinal section on line A A of Fig. 1. Fig. 3 is an elevation of a steel plate used in my construction. Fig. 4 is a side view of Fig. 3.

The same numerals indicate identical parts in the several views.

The object of my device is to provide a brake-shoe of the composite type wherein the desirable qualities of a cast-iron shoe will be largely maintained and the structural strength, durability, economy, and safety whereof will be greatly increased in comparison to a cast-iron shoe.

All of the above objects I claim to have attained in the shoe herein shown and described, while the initial cost of same has not been materially increased.

My improved brake-shoe is constructed substantially as follows: A plate of sheet-steel 1, preferably of about 8 gage, is placed in a specially-constructed punch and forming press and a product there produced such as is shown in Figs. 3 and 4, the same being a sheet of steel somewhat shorter and narrower than the face of the shoe into which it is to be cast. The plate is concaved longitudinally, the radius of said concavity corresponding approximately to the periphery of a car-wheel. Tongues 2 are punched from said plate and their free ends carried inwardly, so that they

project into the concavity aforesaid. At the center of plate 1 two clips or ears 3 are formed, which project outwardly from the convex side and in the opposite direction from tongues 2. Holes 4 are formed in the clips 3 for the purpose hereinafter set forth. The plate thus formed is placed in the mold of a brake-shoe, and a foundry metal, preferably cast-iron, is cast thereabout, the plate 1 occupying a position much nearer the back of the shoe than the face and with the ends of tongues 2 appearing at face 5, Fig. 2, thus forming the composite face. Clips 3 are surrounded by the cast-iron, which forms the attaching-lug 6 of the shoe, and thus it will be readily understood that the plate 1 forms a perfect bond for every portion of my shoe, and if the cast-iron should become fractured to a very considerable extent it is still all held firmly together by the steel plate, and if the cast-iron in the attaching-lug 6 should be wholly severed from the body of the shoe by fracture the shoe would still be securely held to the brake-head by the steel clips 3, the holes 4 in said clips 3 being for the purpose of receiving the attaching-key.

It will be readily seen that the shape and location of the tongues 2 might be greatly varied without departing from the spirit or scope of my invention and that plate 1 could be in any way mutilated provided that the metal formed by such mutilations be carried away from the face of the plate sufficiently far to cause it to appear at the face of the foundry metal and provided, further, that a portion of said plate projects in such a manner as to cause it to become incorporated with the foundry metal in the attaching-lug substantially the manner shown and for the purpose set forth.

Having thus described my device, what I claim as new, and desire to secure by Letters Patent, is—

1. In a composite brake-shoe for railway-brakes, a mutilated steel plate of substantially the width and length of the shoe, with foundry metal cast thereabout, in the form

of a brake-shoe, a portion of the projecting metal caused by the mutilation aforesaid being exposed at the concave face of the shoe, and a portion thereof projecting, so as to be
5 incorporated in the attaching-lug.

2. A brake-shoe for railway-brakes, consisting of a mutilated steel plate, intercast with a foundry metal, in such a manner that portions of said plate appear at the face of

said shoe, and other portions thereof are embodied in the attaching-lug.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN PLAYER.

Witnesses:

A. F. MILLER,
GEO. C. MILLER.