

(No Model.)

J. POLLOCK.

BRAKE SHOE.

No. 374,427.

Patented Dec. 6, 1887.

Fig. 1.

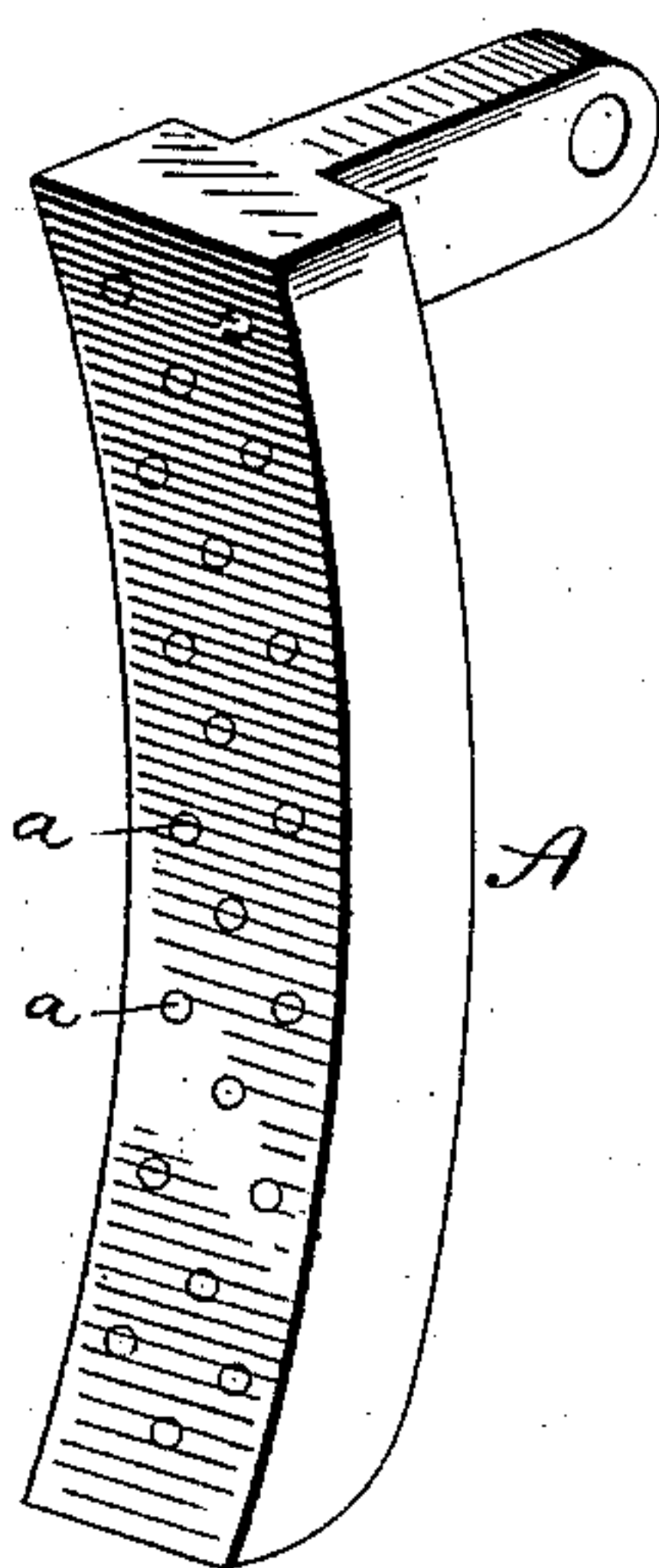
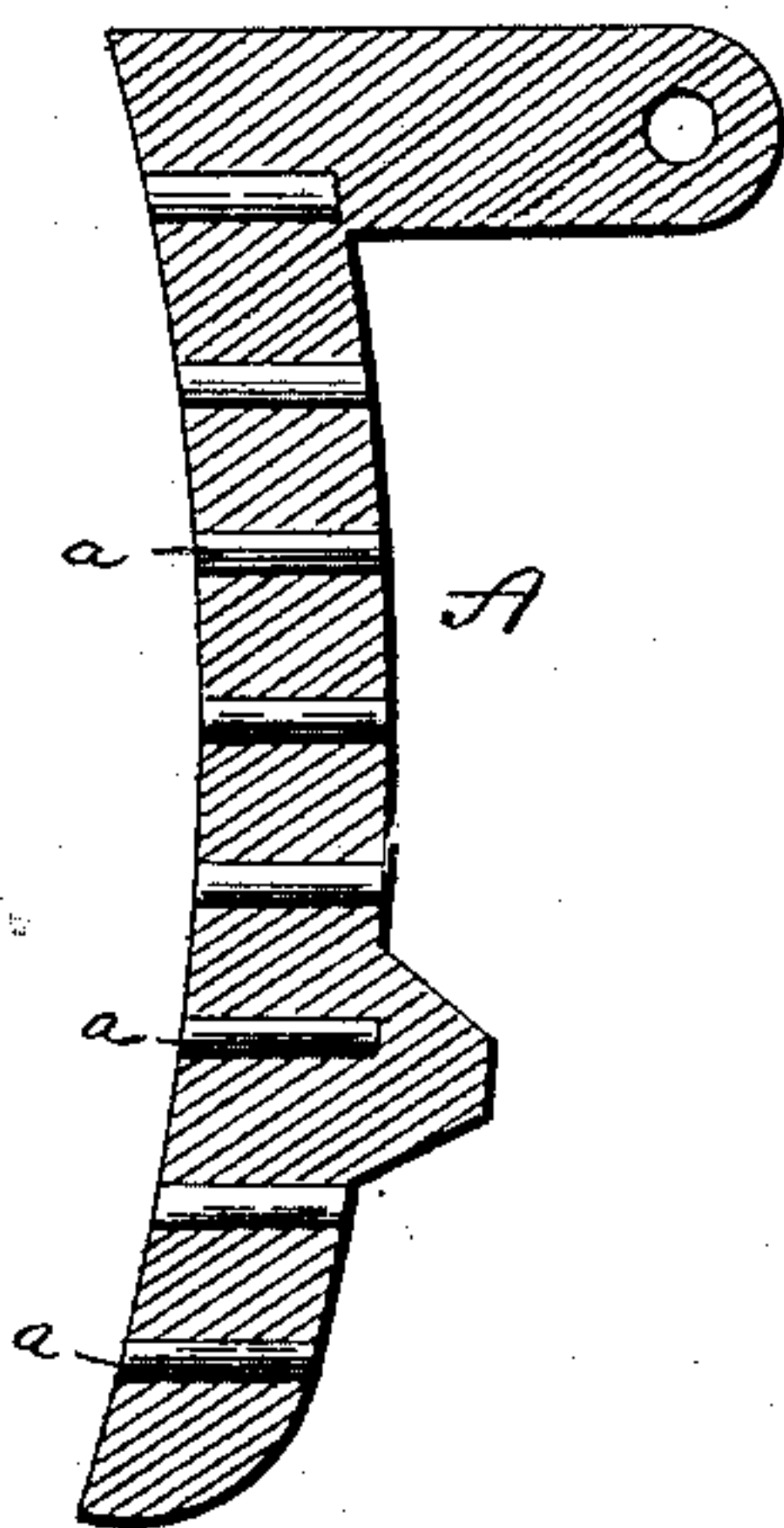


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOSEPH POLLOCK, OF SELMA, ALABAMA.

BRAKE-SHOE.

SPECIFICATION forming part of Letters Patent No. 374,427, dated December 6, 1887.

Application filed September 14, 1887. Serial No. 249,659. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH POLLOCK, a citizen of the United States, residing at Selma, in the county of Dallas and State of Alabama, have invented certain new and useful Improvements in Brake-Shoes, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to brake-shoes for railways and other similar purposes; and the object of my invention is to improve such shoes in a very simple and economical manner, whereby they are rendered more durable than brake-shoes heretofore used without increasing their size or the weight of metal.

Heretofore brake-shoes in use on railway-cars have been made of cast-iron of various degrees of hardness, having incorporated therein with a softer metal for the purpose of obtaining greater adhesion of their impinging surfaces against the perimeters of the wheels, and to the accomplishment of this object at the least expense scrap-iron has been utilized in the manufacture of brake-shoes by embedding pieces thereof into the contact surfaces of the cast-iron body in the process of casting. In such shoes as hitherto made, while they may afford the necessary adhesion to the wheels, the softer metal being only embedded a short distance into the body of the shoe, the shoe soon becomes useless as such before it is worn too thin to afford the requisite strength.

The gist of my invention is to improve the well-known compound metal shoes by constructing them in such a manner that they shall be efficient until worn too thin to afford the requisite degree of strength, as will be fully understood from the following description, taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view showing a face view of my improved brake-shoe, and Fig. 2 is a vertical section through the shoe, clearly illustrating my improvement.

The shoe A may be molded in the usual manner, and it may be of any desired shape. After the pattern has been withdrawn from the mold I adjust therein small rods *a*, of any shape in cross-section in the mold, and have these rods of such length that they are equal to the thickness of the shoe when finished. Cast-iron in a molten state is then poured in the mold, and a shoe, A, formed having the said rods *a* extending entirely through it from its front wearing-face to its back, as clearly shown in Fig. 2.

It will thus be seen that as long as the shoe remains to be useful or possesses the necessary strength its efficiency as a compound shoe will be preserved. It will also be seen that by the arrangement or disposition of the soft-metal rods as shown in the drawings the soft and hard metals will act to a much better advantage or grip on the surface of a wheel than if a single soft-metal block embedded only partly into the harder metal body of the shoe were used, which I disclaim as my invention. It will also be observed that by my invention the small pieces of scrap-iron usually found in large quantities about all machine-shops, and which has hitherto been a total waste or else had to be remelted, may be utilized, as it is immaterial what the shape or configuration the rods extending through the shoe may have.

Having described my invention, I claim—

The within-described improved brake-shoe, composed of a cast-metal body having rods of a softer metal than the body extended entirely through it and cast in it, as herein described.

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

JOSEPH POLLOCK.

Witnesses:

ED. A. NIEL,
JOS. PURVIANCE.