

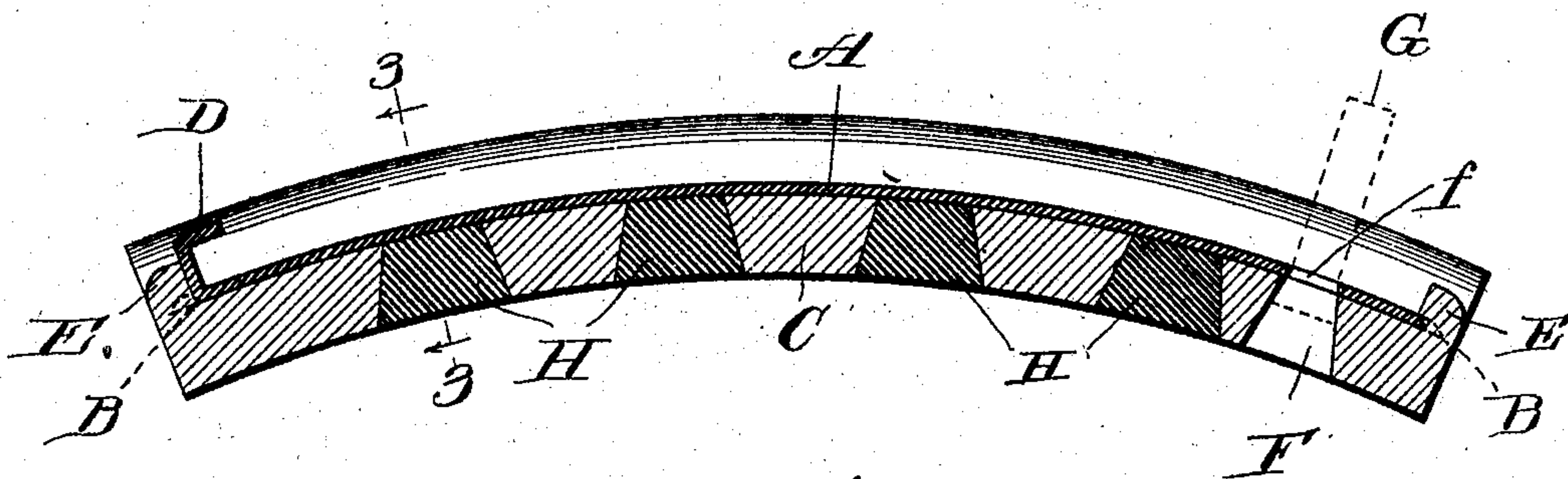
No. 806,240.

PATENTED DEC. 5, 1905

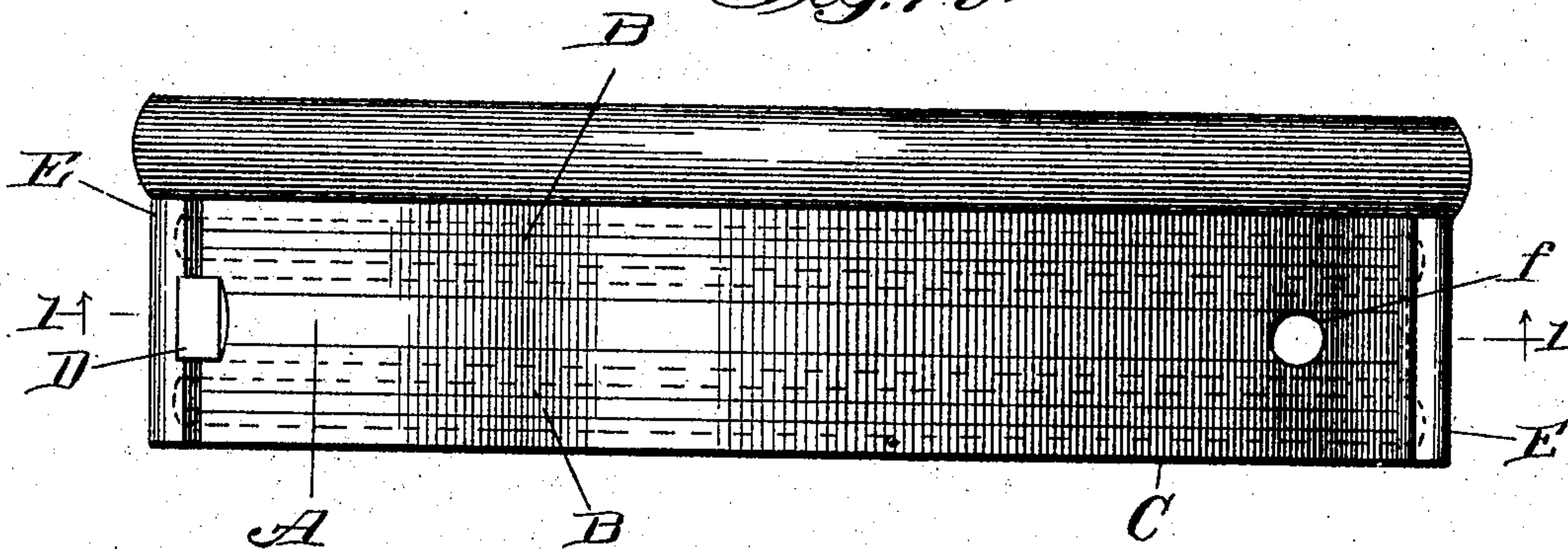
F. P. COLLIER.  
BRAKE SHOE.

APPLICATION FILED SEPT. 21, 1905.

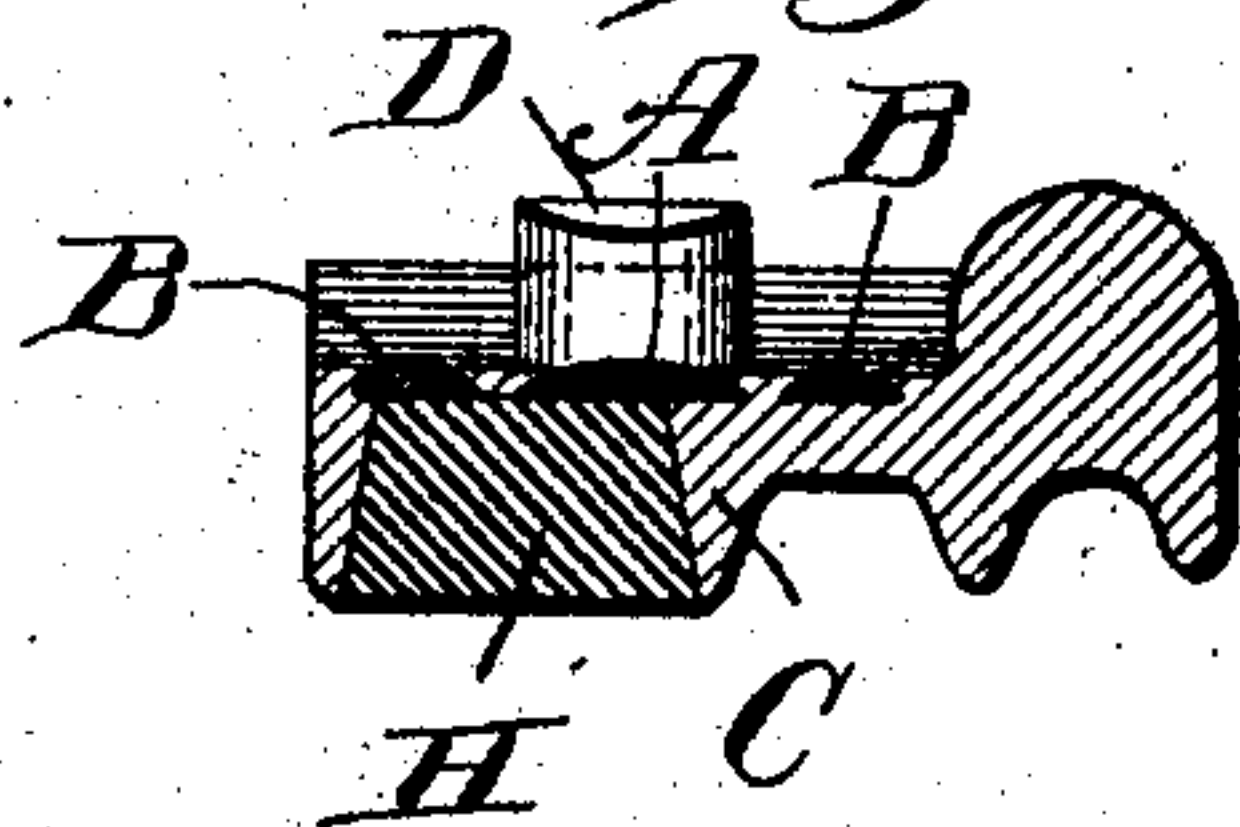
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:

H. S. Gaither  
M. A. Kiddle

Inventor:

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by Wm. H. Bell atty



# UNITED STATES PATENT OFFICE.

FRANK P. COLLIER, OF WILMETTE, ILLINOIS.

## BRAKE-SHOE.

No. 806,240.

Specification of Letters Patent.

Patented Dec. 5, 1905.

Application filed September 21, 1905. Serial No. 279,394.

*To all whom it may concern:*

Be it known that I, FRANK P. COLLIER, a citizen of the United States, residing at Wilmette, in the county of Cook and State of Illinois, have invented new and useful Improvements in Brake-Shoes, of which the following is a specification.

This invention relates to locomotive-driver shoes of that type which are attached to the head by means of a hook on the back of the shoe and a bolt having its head seated in an opening in the body of the shoe.

The object of the invention is to strengthen and reinforce the shoe and hold the parts together in case of fracture and provide for securely uniting the strengthening means to the body of the shoe, at the same time employing the strengthening means to form the attaching-hook and to prevent the bolt from pulling and breaking through the shoe.

In the accompanying drawings, Figure 1 is a longitudinal sectional view of a shoe embodying my invention. Fig. 2 is a top plan view. Fig. 3 is a sectional view on the line 3 3 of Fig. 1.

I employ a plurality of strengthening-strips A B, which are preferably made of half-oval bar-iron, as shown in cross-section in Fig. 3. These strips are separated from each other and are arranged with their flat faces toward the wearing-face of the shoe, and the metal forming the body C flows over the edges of the strips and securely locks the body and strips together.

In the drawings I have shown three strips, the central strip A being somewhat wider than the side strips B, and one end of this central strip is bent up to form the hook D, which abuts against the end lug E. At the other end of the shoe the body is provided with a bolt-opening F, shaped to receive the head of the locking-bolt G, and the central strip A is provided with an opening *f*, which alines with the opening in the body and corresponds in diameter to the smallest diameter of the opening in the body. This construction prevents the bolt-head from pulling through the shoe, which would be liable to occur if the wall of the opening in the body were not strengthened at its smallest diameter by the reinforcing-strip.

My invention can be embodied in a solid cast-iron shoe or in a composite shoe of any variety, and in the drawings I have shown the body provided with a plurality of inserts H.

These locomotive-driver shoes are quite heavy, ranging in weight from thirty-five to seventy-five pounds, and my invention provides a strong and substantial shoe in which the strengthening means is securely united with the body without the liability of blow-holes forming between said means and the body, as occurs when plates are employed for this purpose. The hook will not break in handling or in service, and the bolt-head cannot pull through the body reinforced by the strip. The strips can be made of any metal suitable for the purpose, such as wrought-iron, steel, or malleable iron.

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

1. A locomotive-driver shoe comprising a body, a plurality of separated strips embedded in the body at the back thereof, one of said strips having its end bent up to form an attaching-hook.

2. A locomotive-driver shoe comprising a body, a plurality of separated strips embedded in the body at the back thereof, said body having an opening therein shaped to receive the head of the locking-bolt, and one of said strips having an opening to aline with said opening in the body and corresponding in diameter to the smallest diameter of said opening in the body.

3. A locomotive-driver shoe comprising a body, a plurality of separated strips embedded in the body at the back thereof, said body having an opening therein shaped to receive the head of the locking-bolt, and one of said strips having one end bent to form the attaching-hook and provided at its other end with an opening alining with the opening in the body and corresponding in diameter to the smallest diameter of said opening in the body.

FRANK P. COLLIER.

Witnesses:

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M. A. KIDDIE.