J. J. TATUM.

BRAKE SHOE.

APPLICATION FILED JULY 11, 1913.

1,121,209.

Patented Dec. 15, 1914.

Fig. 1.

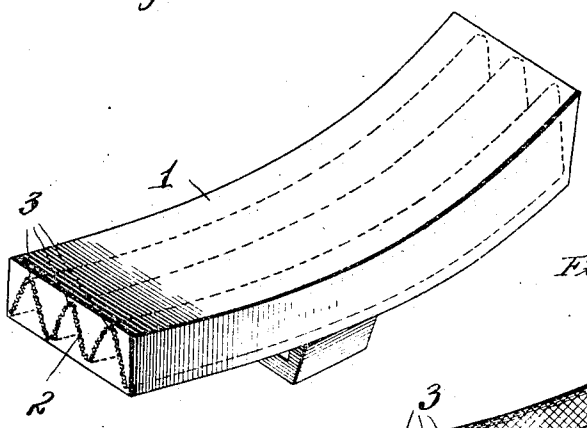


Fig. 2.

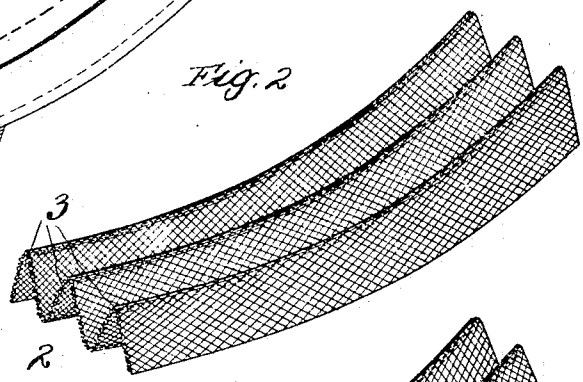


Fig. 3.

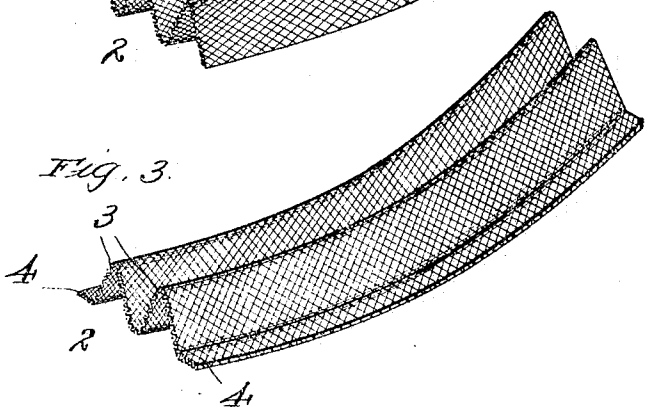


Fig. 4.



Fig. 5.



Fig. 6.



Witnesses

H. A. Bauerschmidt

J. M. Wynkoop

Inventor

John J. Tatum

By Knight Bros

Attorney

UNITED STATES PATENT OFFICE.

JOHN J. TATUM, OF BALTIMORE, MARYLAND.

BRAKE-SHOE.

1,121,209. Specification of Letters Patent. **Patented Dec. 15, 1914.**

Application filed July 11, 1913. Serial No. 778,624.

To all whom it may concern:

Be it known that I, JOHN J. TATUM, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Brake-Shoes, of which the following is a specification.

The object of my invention is to provide the stiffening or girder support extending lengthwise of the shoe, whereby the wearing life of the shoe, as well as the strength of the shoe is increased.

My invention consists broadly in a brake shoe composed of cast metal formed into a solid homogeneous mass with a reticulated strengthening member embedded therein and extending lengthwise of the shoe.

In the drawings:—Figure 1 is a perspective view of a brake shoe embodying my invention. Fig. 2 is a perspective view of the strengthening member detached. Fig. 3 is a similar view of a slight modification of the strengthening member showing another embodiment. Fig. 4 is a cross sectional view of another embodiment of strengthening member. Fig. 5 is a cross sectional view of a still further embodiment of the strengthening member. Fig. 6 is a cross sectional view of still another embodiment of the strengthening member.

1 represents a brake shoe composed of cast metal formed into a solid homogeneous mass and adapted for use on the present type of brake beam equipment.

2 represents a reticulated corrugated member embedded in the shoe when it is cast, the metal of the shoe flowing through the openings in the reticulated member, thus firmly binding said member in said shoe securely and intimately against relative movement with the shoe. The reticulated member may be constructed of wire mesh or expanded metal and it is pressed into V-shaped folds 3 and then pressed to give it an arcuate shape coinciding with the radius of the finished shoe, said strengthening member extending throughout the entire length of the shoe from end to end and giving a girder like support to the shoe throughout its area.

I may form the strengthening member with side marginal flanges 4 as shown in Fig. 3 and may have but one fold as shown in Figs. 4 and 5. Again, I may form said strengthening member with a central flat portion 5 with said marginal folds as shown in Fig. 6.

While a strengthening member, embodying my invention, materially strengthens the shoe and adds to the life of the shoe, at the same time, it does not interfere with the friction produced by the cast iron forming the body of the shoe and will not prevent the retarding of the car wheels when the brakes are applied but will give a more desirable retarding effect to the brake shoe and will not cut grooves in the treads of the wheels.

What I claim is:—

1. As a new article of manufacture, a brake shoe composed of cast metal, formed into a solid homogeneous mass, with a wire netting formed into V-shaped folds and extending lengthwise of the shoe.

2. As a new article of manufacture, a brake shoe composed of cast metal formed into a solid homogeneous mass, and a reticulated member formed of V-shaped folds extending lengthwise of the shoe and serving as a girder support for the shoe.

3. As a new article of manufacture, a brake shoe composed of cast metal, formed into a solid homogeneous mass, and a reticulated member made with a multiple of V-shaped folds formed throughout their length on the arc of the shoe and embedded in said mass.

4. As a new article of manufacture, a brake shoe composed of cast metal, formed into a homogeneous mass, with a reticulated member embedded therein; said member comprising a plurality of V shaped folds formed on the arc of the shoe and extending in the direction of the length of the shoe, and giving a girder-like support for the shoe throughout its area.

5. A combined wearing and strengthening insert for brake shoes comprising a corrugated member, the corrugations of which extend in the direction of the length of the shoe.

6. As a new article of manufacture, a strengthening member, adapted to be embedded in a cast brake shoe, comprising a reticulated body formed with V-shaped folds extending in the direction of its length.

7. As a new article of manufacture, a strengthening member for brake shoes,

adapted to be embedded in the shoe when cast, comprising a reticulated arcuate body formed with V-shaped folds extending in the direction of its length.

8. As a new article of manufacture, a strengthening member for brake shoes, adapted to be embedded in the shoe when cast, comprising a reticulated arcuate body formed with V-shaped folds and flat, side, marginal flanges extending in the direction of its length.

The foregoing specification signed at Baltimore, Md., this 20 day of June, 1913.

JOHN J. TATUM.

In presence of two witnesses:
SIMON GREENEBAUM,
ELLA TATUM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."