

C. V. ROTE.
CAR BRAKE.
APPLICATION FILED JAN. 26, 1911.

Patented Oct. 24, 1911.

1,006,682.

FIG. 1.

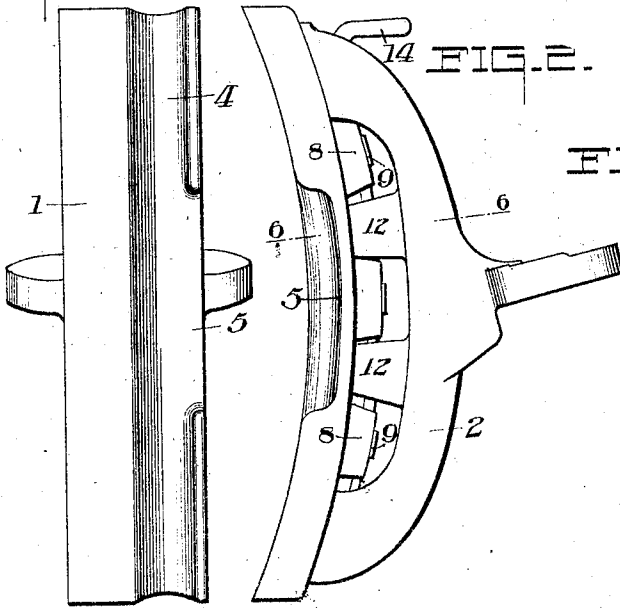


FIG. 2.

FIG. 3.

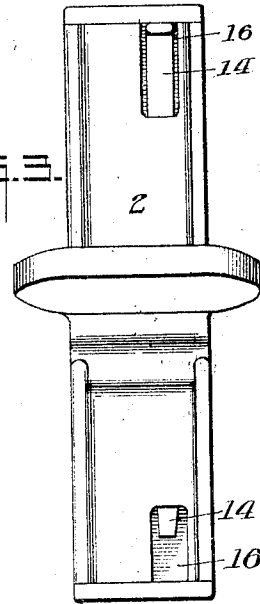


FIG. 4.

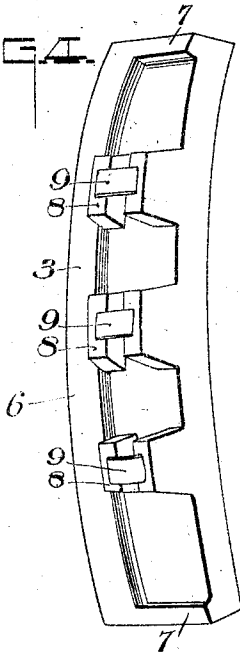


FIG. 5.

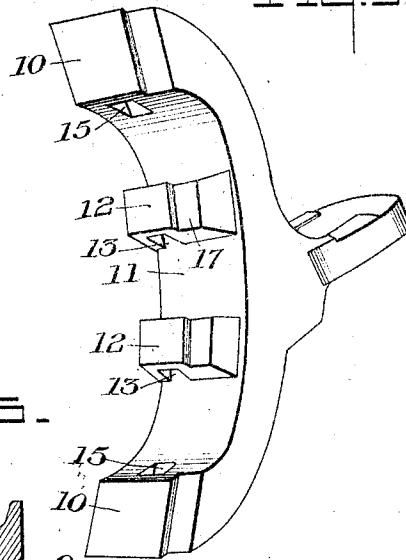
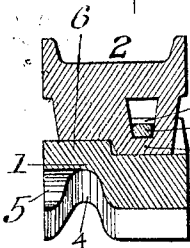


FIG. 6.



Witnesses
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UNITED STATES PATENT OFFICE.

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CAR-BRAKE.

1,006,682.

Specification of Letters Patent.

Patented Oct. 24, 1911.

Application filed January 26, 1911. Serial No. 604,911.

To all whom it may concern:

Be it known that I, CHARLES V. ROTE, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Car-Brakes, of which the following is a specification.

My present invention has for its object the provision of means whereby a brake shoe adapted to engage both the tread and flange of a car wheel may be detachably secured to the brake block or head, in such a manner that the braking pressure may be applied through the entire extent of the shoe.

A further object of the invention is to provide a construction by which twisting of the shoe upon the head will be prevented.

These stated objects, and such other incidental objects as will hereinafter appear, are attained in the device illustrated in the accompanying drawings; and the invention consists in certain novel features of the same which will be hereinafter first fully described and then more particularly pointed out in the appended claim.

In the annexed drawings, Figure 1 is a front view of the brake shoe and head, looking at the concave or braking face of the shoe. Fig. 2 is a side elevation of the same. Fig. 3 is a back view. Fig. 4 is a perspective view of the shoe. Fig. 5 is a perspective view of the head. Fig. 6 is a cross section on line 6—6 of Fig. 2.

In carrying out my present invention, I employ a brake shoe 1 and a brake block 2. The brake shoe is offset laterally along one side, as shown at 3, the offset forming a flange-engaging groove 4 on the concave face or front side of the shoe while to save metal and to reduce the weight of the shoe without affecting its strength, the edge of the shoe may be cut away at its center, as shown at 5. On the convex or rear side of the shoe, the offset forms a longitudinal rib 6 while at the ends of the shoe transverse ribs 7 extend from this longitudinal rib 6 to the opposite side edge of the shoe. At intervals on the back or convex side of the shoe are keepers consisting of pairs of lugs 8 cast with the shoe and steel straps 9 anchored in the lugs in the process of casting the shoe. One lug of each pair of lugs is formed on the side of the longitudinal rib 6 while the other lug of each pair of lugs is arranged at the

edge of the shoe, the keepers being thus brought into perfect alinement so that the connecting key may be easily inserted.

The brake block 2 has the general outline of a crescent in side view, being cut away or recessed between its ends and having curved surfaces 10 at its ends to bear against the convex rear side of the shoe, the extremities of the block fitting against the transverse ribs 7 on the shoe and thereby preventing relative longitudinal movement of the shoe and the block. The curved surfaces 10 extend close to the outermost keepers on the shoes and the recessed portion 11 of the block enables the block to fit over all the keepers. Within the recessed portion of the block, lugs 12 are cast thereon and these lugs fit between the keepers as shown and as will be understood. These lugs are provided with openings 13 near one end which, when the block and shoe are in their proper relative positions, will be in alinement with the keepers on the shoe to form a passage through which a key 14 may be inserted to secure the shoe to the block. The end walls of the recess 11 are provided with openings 15 to admit the key and guide it to the keepers and the apertured lugs and openings coincide with grooves 16 in the outer side of the block at the ends of the same which receive the ends of the key. The lugs 12 extend nearly across the block so as to project over the longitudinal rib 6 on the shoe, and one corner of each lug and one edge of each face 10 is cut away thereby forming alined notches 17 which permit the said lugs and curved faces to fit against and over said rib. The shoe and block will thus be prevented from twisting upon each other and the block is caused to extend over the flange-engaging portion of the shoe so that the braking pressure will be distributed evenly throughout the entire body of the shoe so that an efficient braking engagement of the shoe with the wheel will be effected and the wear upon the shoe will be uniform throughout its working face.

I claim as my invention and desire to secure by Letters Patent:

The combination of a brake shoe provided at one side with a longitudinal rib on its convex face and having transverse ribs at its ends on said face, a series of keepers on the shoe between the longitudinal rib and the opposite side of the shoe, a brake block

having its ends engaging the transverse ribs
on the shoe and provided with curved sur-
faces bearing against the shoe, said curved
surfaces being notched at one side to fit
5 over the longitudinal rib on the shoe and
the block being recessed between said sur-
faces, lugs on the block within said recessed
portion thereof, said lugs having openings
10 through one end and being notched at the
opposite end to engage over the longitudinal

rib on the shoe, and a key inserted through
the openings in said lugs and through the
keepers on the shoe.

In testimony whereof I affix my signa-
ture, in presence of two witnesses.

CHARLES VICTOR ROTE.

Witnesses:

CHAS. E. LONG,
C. A. GROST.