

UNITED STATES PATENT OFFICE.

WILLIAM HENRY SAUVAGE, OF DENVER, COLORADO, ASSIGNOR OF TWO-THIRDS TO HENRY NEWTON WOOD AND CHARLES C. WELCH, OF SAME PLACE.

AUTOMATIC BRAKE-BLOCK.

SPECIFICATION forming part of Letters Patent No. 654,807, dated July 31, 1900.

Application filed November 13, 1899. Serial No. 736,786. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY SAUVAGE, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Automatic Brake-Blocks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in automatic brake-blocks; and it consists of the features hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a vertical longitudinal section of my improved automatic brake-block shown in its normal position—that is to say, when the shoe is inactive or idle. Fig. 2 is a rear view of the same. Fig. 3 is a section similar to Fig. 1, but with the brake-shoe in the raised position. Fig. 4 is a rear view of the brake-shoe.

Similar reference characters indicating corresponding parts in the views let the numeral 5 designate the brake-beam, which may be of any suitable construction. To this beam is secured the brake-head 6 by a bolt 7, which passes through registering apertures formed in a rearward projection 6^a of the head and the beam 5. The brake-head is provided with an inclined slot 8 in its upper portion. The upper extremity of this slot is forward of its lower extremity, and its length is such as to permit the necessary brake-setting movement of the shoe, as hereinafter explained. The lower extremity of the head is provided with an inclined face 9. The central portion of the head is provided with a recess 10 of sufficient size to receive and permit the operation of an eccentric cam 12, mounted on a bolt 13, passed transversely through the head. To the protruding extremities of this bolt are attached the lower extremities of the supporting-links 14. The brake-shoe 15 is provided with two ears 16, which straddle the

upper reduced portion 6^c of the head. These ears are provided with openings positioned to register with the inclined slot 8 of the head. The shoe is connected with the head by a bolt 17, passing through the openings of the ears 16 and the slot 8. The lower extremity of the shoe is provided with an inclined face 15^a, which extends forward from its lower extremity and is engaged by the cooperating inclined face 9 of the head. The eccentric cam 12 is provided with a tooth or cog 12^a, which engages the recess 15^c, formed in the rear side of the shoe.

The beam 5 is supported to be moved back and forth in proximity to the car-wheel. (Not shown.) As soon as the shoe is brought into contact with the wheel the shoe is automatically moved upwardly by the resulting friction. It is also simultaneously moved forward by virtue of the engagement of the bolt 17 with the inclined slot 8, the engagement of the eccentric cam with the rear face of the shoe, and by the engagement of the inclined faces 15^a and 9, formed on the shoe and head, respectively. This forward movement of the shoe is indicated in Fig. 3 by the space 18 between the adjacent faces of the shoe and the head. As soon as the brake-beam moves away from the wheel sufficiently to release the brake-shoe the latter falls downwardly to its normal position (see Fig. 1) and is supported on the head by virtue of the construction illustrated and heretofore described.

Having thus described my invention, what I claim is—

1. A brake-block composed of two members, namely, a head and a shoe movably mounted thereon, said members being provided with inclined engaging faces, a bolt fitted into apertures formed in one member and engaging an inclined slot formed in the other member, an eccentric cam mounted on one member and engaging the adjacent face of the other member.
2. A brake-block composed of two members, namely, a head and a shoe, said members being provided with inclined engaging faces, and an eccentric cam mounted on one member and engaging the adjacent face of the other member.
3. A brake-block composed of two members,

namely, a head and a shoe movably mounted thereon, a bolt fitted into openings formed in one member and engaging an inclined slot formed in the other member, and an eccentric
5 cam mounted on one member and engaging the adjacent face of the other member.

4. A brake-block comprising a head and a shoe movably mounted thereon, the said members being provided with inclined engaging
10 faces, a bolt fitted into openings formed in one member and engaging an inclined slot formed in the other member, an eccentric cam mounted on one member and engaging

the adjacent face of the other member, the inclined faces, the cam, the bolt and the inclined slot being constructed and arranged
15 to simultaneously coöperate to move the brake-shoe forward away from the head as the tread of the wheel engages the friction-face of the shoe. 20

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

WILLIAM HENRY SAUVAGE:

Witnesses:

GRACE MYTINGER,

A. J. O'BRIEN.