No. 608,561. Patented Aug. 2, 1898.

# W. H. SAUVAGE.

## BRAKE.

(Application filed Sept. 16, 1897.)

(No Model.)

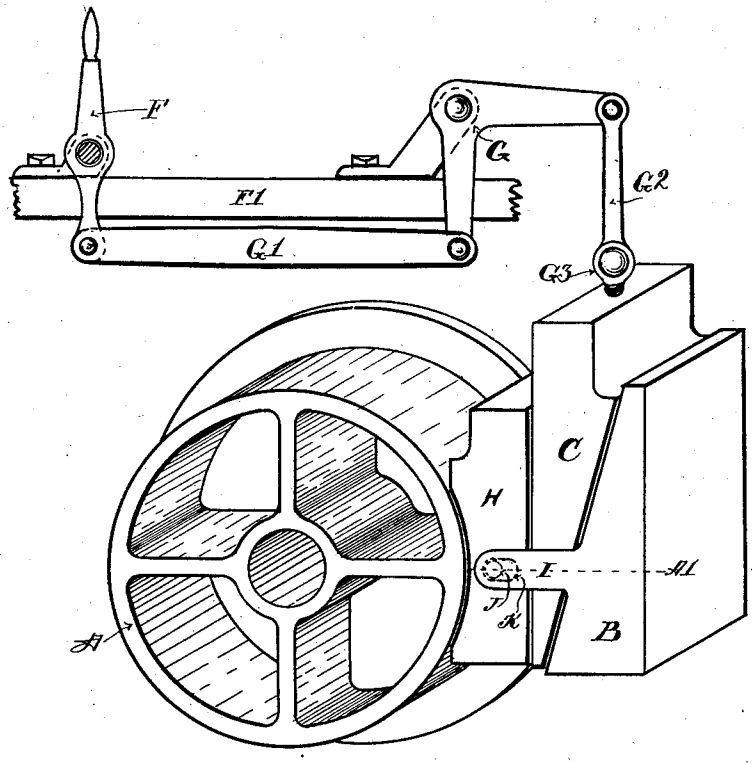


Fig 1.

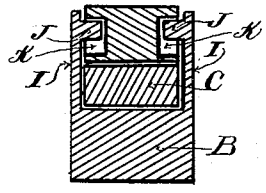


Fig 2.

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# UNITED STATES PATENT OFFICE.

WILLIAM HENRY SAUVAGE, OF DENVER, COLORADO.

## BRAKE.

SPECIFICATION forming part of Letters Patent No. 608,561, dated August 2, 1898.

Application filed September 16, 1897. Serial No. 651,934. (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 Brakes; 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 letters of reference marked thereon, which form a part of this specification.

My invention relates to an improved brake for vehicles of all kinds, especially street and steam-railway cars, and also to hoisting machinery and the like, the object of the invention being the production of a simple, durable, and quickly and positively acting brake that can be operated by manual or other power.

The invention will first be described in connection with the accompanying drawings and then pointed out in the claims.

Figure 1 of the drawings is a perspective view, partly in elevation, of my improved brake as applied to a car-wheel. Fig. 2 is a horizontal sectional view taken on the dotted line A', Fig. 1.

Referring to the drawings, A designates a wheel to which it is desired to apply a brake.

B represents the base of my improved brake, which is fixed immovable in any suitable manner and arranged to stand in line with the tread of the wheel. That side of the base toward the wheel, which I term the "face," is inclined inward from its top to its bottom.

H represents a brake-shoe placed between the base and the wheel and supported in any manner that will allow it to be moved to and fro with relation to the wheel. I have represented it as connected with and thus supported by the base through the medium of arms I, projecting from the latter on either side, these arms being provided with inwardly-projecting studs J, which freely enter slots K, formed in the sides of the shoe, as clearly shown in Fig. 2. This arrangement permits the shoe to be moved forward toward or backward from the wheel.

C represents a cuneal block, which I term the "wedge." It is located between the base and the shoe and may be both lowered and raised in that position by any suitable means. One very desirable form of wedge-operating mechanism is shown in Fig. 1, wherein F is an operating-lever pivoted to a suitable support F'; G, a bell-crank; G', a rod pivotally connecting one arm of the bell-crank to the operating-lever, and $G^2$ a link pivotally connecting the other arm of the bell-crank to a bolt $G^3$, secured to the wedge.

The operation of my improved brake will be obvious from the drawings, as it will be readily understood that by moving the operating-lever in one direction the wedge will be moved downward between the base and shoe, thus forcing the latter against the wheel with a braking action, and also that by moving the lever in the opposite direction the wedge will be raised, thereby permitting the shoe to clear the wheel.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a brake, the combination, with a fixed base having an inclined face, of a brake-shoe movably supported in operative position relative to the base and the wheel or other article on which it is to act, a wedge interposed loosely between the inclined face of the base and the shoe, and means positively attached to the wedge for moving the latter into and out of wedging contact with the shoe.

2. In a brake, the combination, with a fixed base provided on its sides with forwardly-projecting arms carrying inwardly-projecting studs, of a brake-shoe located between said arms and formed with slots for the reception of said studs, a wedge interposed loosely between the base and shoe, and means for moving the wedge into and out of wedging contact with the shoe.

3. A brake mechanism comprising a fixed base having an inclined face and provided with forwardly-projecting arms carrying inwardly-projecting studs, a brake-shoe located between said arms and formed with slots for receiving said studs, a wedge interposed loosely between the inclined face of the base and the shoe, and lever mechanism for moving the wedge into and out of wedging contact with the shoe.

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

WILLIAM HENRY SAUVAGE.

Witnesses:

GEORGE STEVENSON,

JOSIAH A. FOWLER.