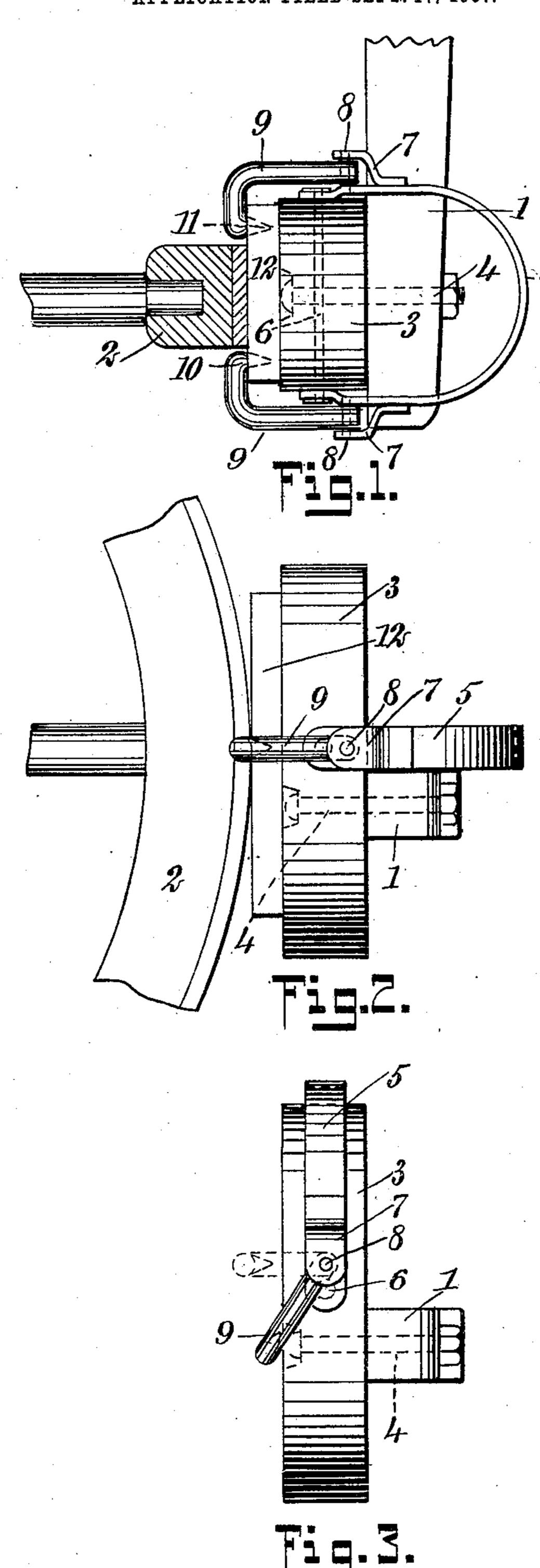
J. G. WELLER.

BRAKE FOR VEHICLES.

APPLICATION FILED SEPT. 17, 1907.



WITNESSES Chas. a. Clark

It de Summen

INVENTOR

James G. Weller

BY

MITTORNEYS

THE NORRIS PETERS CO., WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

JAMES GRANT WELLER, OF MUNHALL, PENNSYLVANIA.

## BRAKE FOR VEHICLES.

No. 891,120.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, James Grant Weller, a citizen of the United States, and a resident of Munhall, in the county of Allegheny and 5 State of Pennsylvania, have invented a new and Improved Brake for Vehicles, of which the following is a full, clear, and exact description.

This invention relates to brakes such as used on vehicles, and the object of the invention is to produce a simple mechanism for removably attaching a brake block or rubbing

face to the brake shoe.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan of the brake, showing that portion of the brake beam to which the same is attached, and also showing a portion of the vehicle wheel upon which the brake is applied; Fig. 2 is a side elevation of the parts shown in Fig. 1; and Fig. 3 is also a side elevation but representing the parts of the brake in the position into which they are moved when the block or wearing strip is removed.

Referring more particularly to the parts, 1 represents the brake beam which projects horizontally across the body of the vehicle 35 so that its ends lie adjacent to the wheel 2. On the side of the brake beam adjacent to the wheel 2, a brake shoe 3 is permanently attached by means of a bolt and nut 4 as indicated. To this shoe 3 a yoke 5 is mounted 40 upon a horizontal pivot bolt 6 which extends through the shoe as indicated. This yoke is provided on its outer sides near the pivot bolt, with outwardly offset ears 7 which are connected with the body of the 45 yoke by wrist pins or studs 8. On these studs 8 between the ears and the body of the yoke, shackles 9 are pivotally attached, the said shackles having elongated shanks which are bent over so as to form pointed hooks 10 50 which are adapted to project toward the shoe as indicated in Fig. 3. In this way the hooks 10 are formed with spurs 11 which project toward and lie adjacent to the face of the shoe.

By using the yoke 5 as a handle, the shac-55 kles 9 may be moved toward or away from the shoe. In fastening a block or wearing

strip 12 upon the face of the shoe, the yoke 5 is moved into the position shown in Fig. 3. In this position, the shackles 9 are held removed toward the left. The block is then placed in position on the face of the shoe, and the yoke 5 is moved downwardly toward the right until it comes into the position in which it is indicated in Fig. 2. In this way the shackles are advanced toward the right so 65 that their spurs 11 become buried in the inner face of the block on each side of the wheel, as indicated in Fig. 1. In other words, the shackles are eccentrically attached to the yoke with respect to the axis of its pivot. 70

It will be observed from an inspection of Fig. 2, that when the block has been locked upon the shoe in this manner, the axes or centers of the pivot bolt 6 and the studs 8 will be in alinement with the spurs 11, and 75 hence the mechanism is on a dead center, and there will be no tendency for the parts to

become unlocked.

When the block 12 becomes worn, it may be evidently replaced by another, simply by 80 raising and lowering the yoke in the manner described. In this way I avoid the use of nails or similar fastening devices, which destroy the shoe and increase the wear on the tire of the wheel if they should come in con-85 tact therewith.

The yoke 5 is arranged above the beam 1, so that the beam operates as a stop to limit the downward movement of the yoke when it is forced "home".

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

1. A brake shoe having a member pivotally attached thereto, and shackles eccentrically 95 mounted on said member, having extensions adapted to engage a block on the face of said shoe, said member constituting a lever for operating said shackles.

2. A brake shoe having a yoke pivotally 100 attached thereto, shackles pivotally attached to said yoke and having extensions, and a removable block on the face of said shoe and

engaged by said extensions.

3. A brake shoe having a yoke pivotally 105 attached thereto, studs carried by said yoke and removed from the pivot point thereof, shackles carried by said studs and having extensions overlying the face of said shoe adjacent to the wheel, whereby a removable 110 block may be attached on the face of said shoe by the movement of said yoke.

4. A brake beam having a shoe attached thereto, a yoke pivotally attached to said shoe, shackles pivotally carried by said yoke at a point off the axis of said yoke, said 5 shackles having spurs projecting toward the face of said shoe and adapted to engage a removable block held upon said shoe, said yoke affording means for clamping said block to said shackles, and normally resting upon the 10 face of said beam whereby said beam consti-

tutes a stop limiting the clamping movement of said yoke.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES GRANT WELLER.

Witnesses:

ED ROTE, I. Grossman.