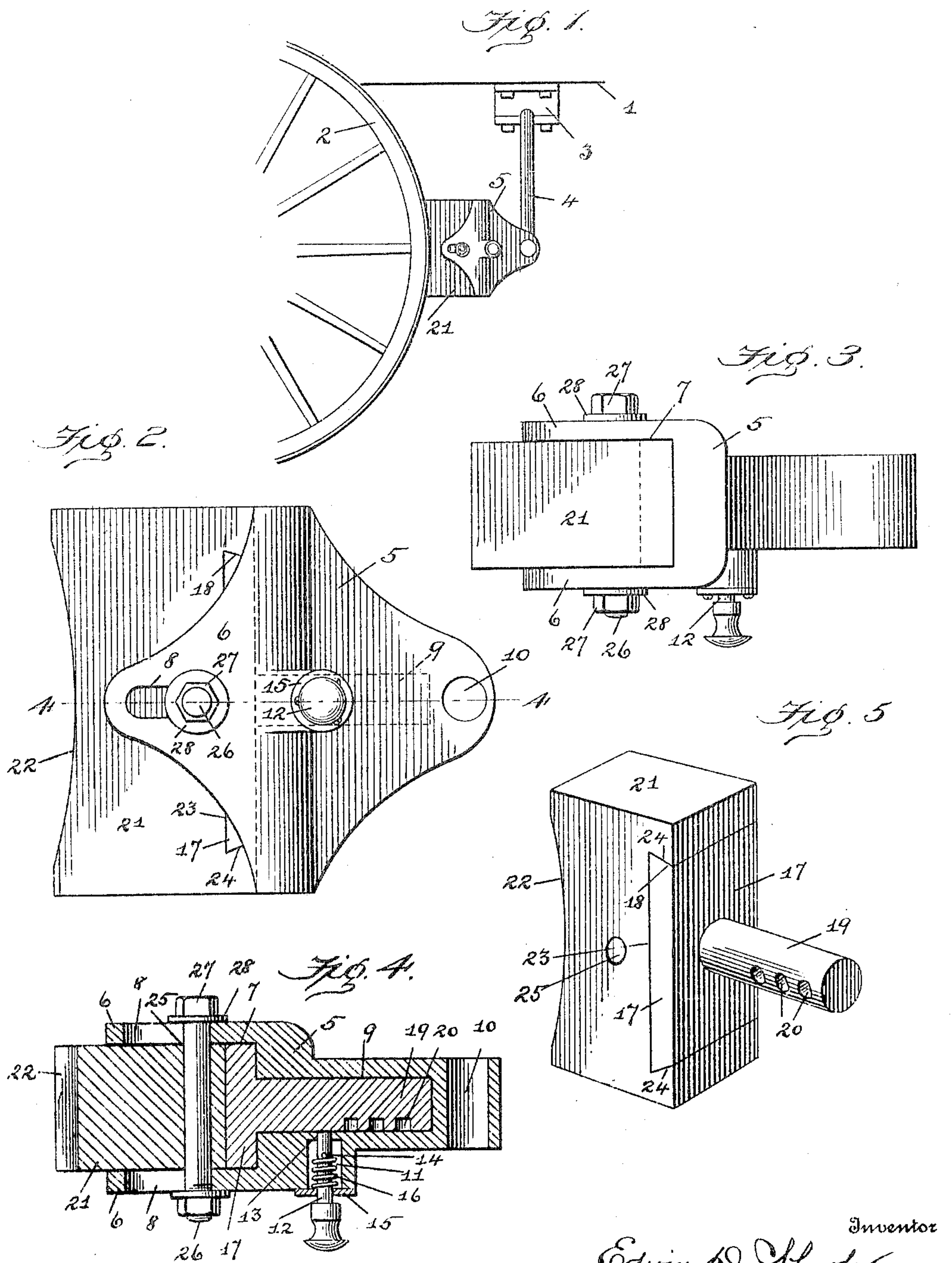


E. D. SHOOP.
BRAKE SHOE FOR VEHICLES.
APPLICATION FILED MAR. 31, 1905.



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BRAKE-SHOE FOR VEHICLES.

No. 804,629.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed March 31, 1905. Serial No. 253,200.

To all whom it may concern:

Be it known that I, EDWIN D. SHOOP, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented
5 certain new and useful Improvements in Brake-Shoes for Vehicles, of which the following is a specification.

This invention relates to brake-shoes for vehicles.

10 The object of the invention is to provide a brake-shoe which shall be adjustable, so that as the shoe wears as the result of frictional contact with the wheel it may be quickly adjusted to take up the wear and always keep
15 the brake in good condition, as well as prolong the usefulness of the shoe.

The accompanying drawings illustrate the invention, in which—

20 Figure 1 illustrates a portion of a vehicle-wheel and also shows the hanger and crank which carries my improved shoe. Fig. 2 is a detail side elevation of the improved device. Fig. 3 is a top plan view of the same. Fig. 4 illustrates a horizontal sectional view taken
25 on the line 4-4 of Fig. 2, and Fig. 5 illustrates a perspective view of the detached shoe.

Referring to the drawings by numerals, 1 designates the bottom of a vehicle; 2, one of the wheels thereof; 3, the hanger for sustaining the rock-shaft, and 4 the crank-arm.
30

The parts may be constructed and arranged in any preferred manner, as in themselves they form no part of the present invention.

35 The lower end of the crank-arm 4 pivotally sustains the brake-block 5, which latter is provided with vertical side walls 6, between which a recess 7 is formed. These side flanges of the brake-block are also provided with horizontal slots 8 for a purpose presently to be
40 described. A circular recess or cavity 9 is also provided in the brake-block, and said cavity extends horizontally from the recess 7 toward the pivot-point 10 of the block. At one side and between the pivot-point and the
45 slot 8 the block is also provided with a bolt-recess 11, which extends inwardly toward the central circular cavity 9. A bolt 12 extends through the recess 11 and enters a hole 13, which extends from said bolt-recess into the
50 circular cavity 9. A pin 14 passes through the bolt near its inner end, and a plate 15 fits around the bolt and is secured to the side of the brake-block over the bolt-recess. A spiral spring 16 surrounds the bolt and is compressed
55 between the pin 14 and the plate 15, and said

spring serves to keep the bolt pressed inwardly toward the central circular cavity 9.

A brake-shoe and holder is employed which comprises a plate 17, having in the present instance beveled upper and lower horizontal
60 edges 18, and at one side the plate is provided with a horizontally-projecting stem 19, which projects into the central circular cavity 9 of the brake-block. This stem 19 of the shoe-holder is provided at one side with a plurality
65 of sockets or holes 20, which are arranged in a horizontal plane and which when the stem is in the cavity have position in-line with the hole 13 and bolt 12 in the brake-block.

70 The shoe comprises a block 21, which is provided at its outer vertical side with a concave face 22, which contacts with the tire of the wheel 2, and at the inner side said shoe is provided with a recess 23, having an inclined wall 24 at its upper and lower side, so as to
75 permit the plate 17 of the shoe-holder to be fitted in said recess and held therein by the inclined walls, which form a dovetail connection. It is obvious that the brake-shoe may be bolted to the plate 17 instead of being held
80 by the dovetail connection. A hole 25 is also provided in the brake-block between the plate 17 and the concave face 22, and a bolt 26 extends through said hole 25 and has its ends projecting through the slots 8 in the brake-
85 block. Nuts 27 and washers 28 are provided on the ends of the bolt 26, by which the sides of the brake-block may be clamped to aid in holding the brake-shoe in the adjusted position.

90 It will be understood that to adjust the brake-shoe it is only necessary to loosen the nuts 27 and withdraw the spring-bolt 12. When this has been done, the brake-shoe and holder may be moved outwardly, so as to partly withdraw the stem 19 from the cavity
95 9, and as soon as one of the holes or sockets 20 registers with the hole 13 in the brake-block the end of the bolt 12 will spring into it and lock it. The nuts 27 on the ends of the bolt 26 may then be tightened to aid in
100 clamping the brake-block and holder in place, and thus relieve the spring-bolt of the vibration and jar to which the shoe is subjected.

It will be seen that when a shoe is worn out it will only be necessary to fit a new shoe on
105 the plate 17.

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

1. The combination with the crank-arm, of 110

a brake-block carried by said arm; a spring-bolt on said brake-block, and a brake-shoe fitting into said brake-block and provided with a plurality of sockets with which the
5 spring-bolt may engage to adjustably secure the shoe to the block.

2. The combination with a crank-arm, of a brake-block carried by said arm and provided with a central cavity; a bolt on said brake-
10 block and movable into the cavity, and a brake-shoe having a stem which projects into the cavity of said brake-block and said stem having a plurality of sockets for the recep-
tion of the bolt in the brake-block.

15 3. The combination with a crank-arm, of a brake-block carried by said arm and having a central cavity and a side bolt-recess; a spring-bolt in said side recess and movable into said
cavity, and a brake-shoe having a stem which
20 enters the cavity in said block and said stem

having a plurality of sockets into any one of which the spring-bolt may be projected to adjustably secure the shoe to said block.

4. The combination with a crank-arm of a brake-block attached to said arm and having
25 side walls each provided with a slot and also having a central cavity; a plate having a stem which fits adjustably in said cavity; a locking-bolt in the side of said brake-block and said
bolt adapted to engage the side of said stem; 30
a shoe attached to said plate and between the side walls of the brake-block, and a bolt through said shoe and in the slots of said
brake-block.

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

EDWIN D. SHOOP.

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