

(No Model.)

J. L. WICKS.  
BRAKE SHOE.

No. 573,376.

Patented Dec. 15, 1896.

Fig. 1.

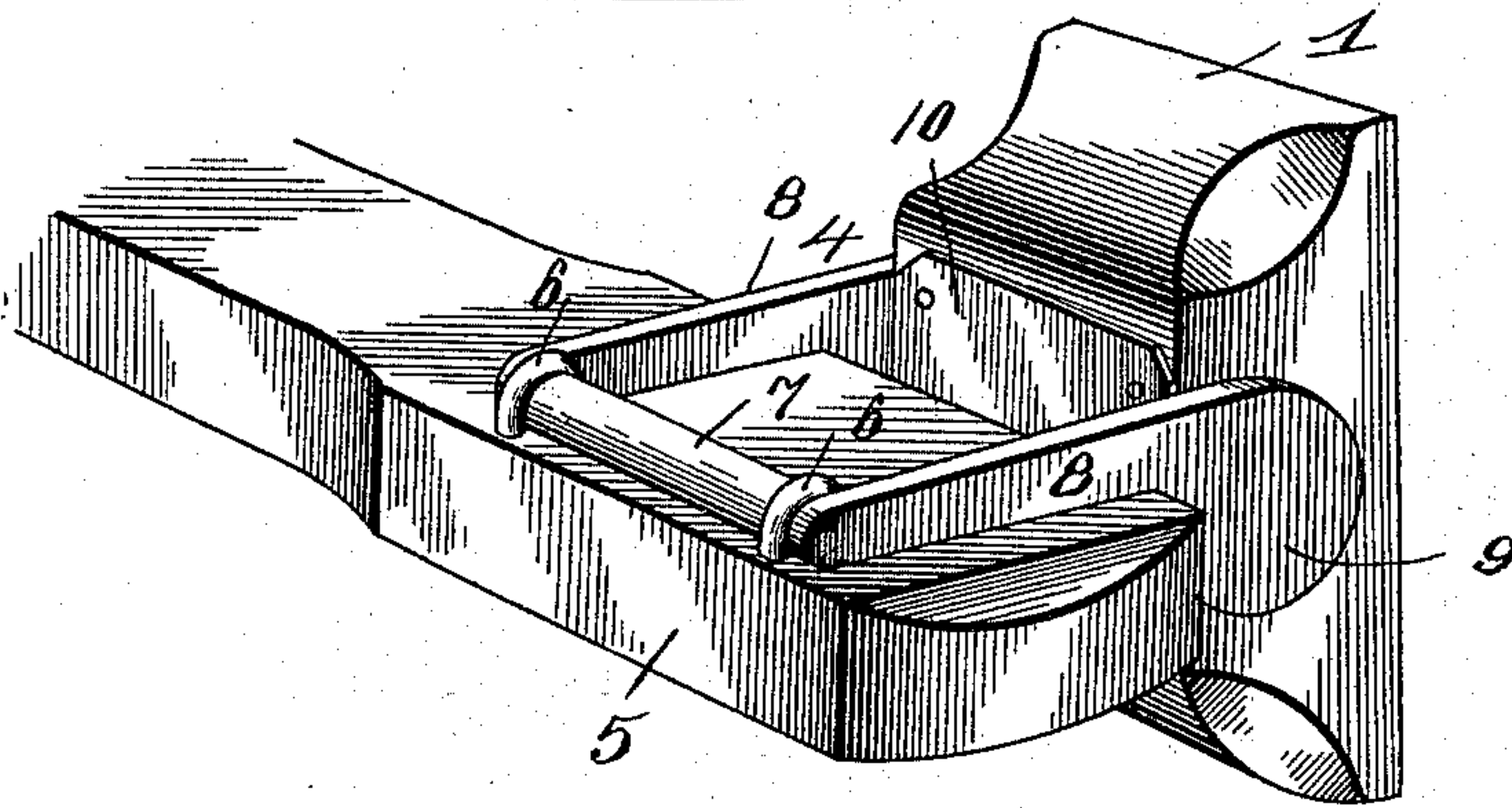


Fig. 2.

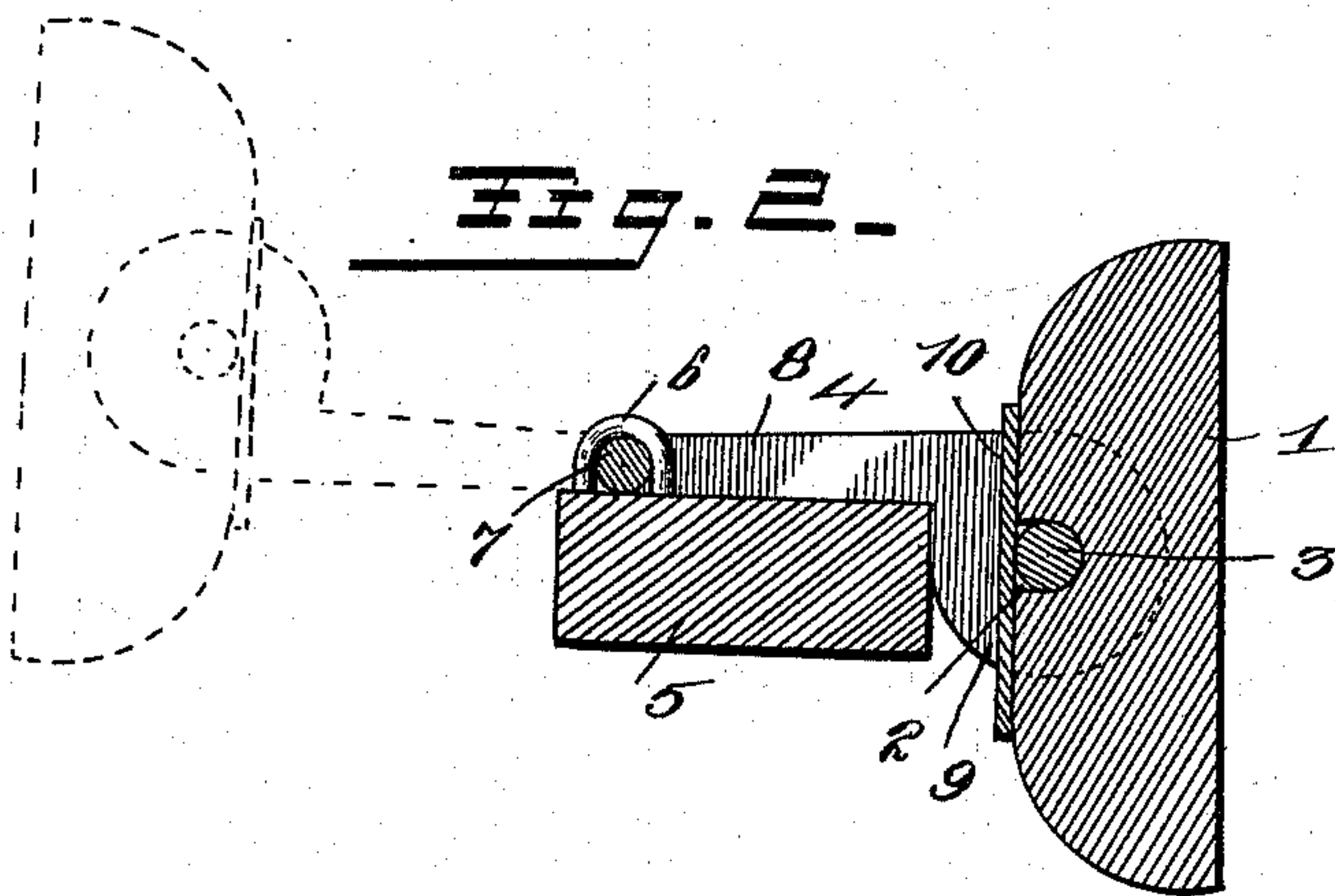
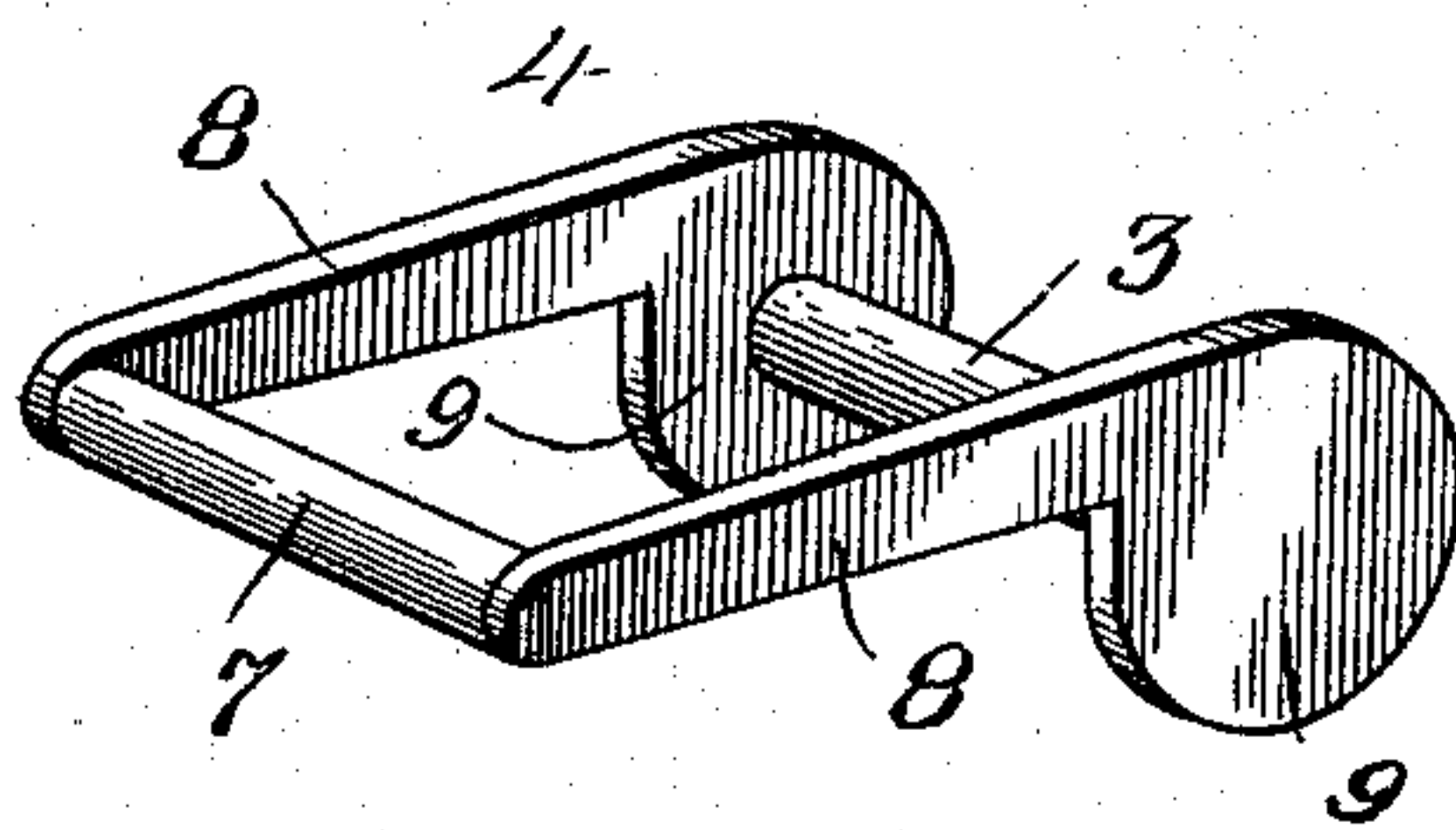


Fig. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN L. WICKS, OF FITZGERELL, ILLINOIS.

## BRAKE-SHOE.

SPECIFICATION forming part of Letters Patent No. 573,376, dated December 15, 1896.

Application filed October 26, 1895. Serial No. 567,002. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN L. WICKS, a citizen of the United States, residing at Fitzgerald, in the county of Jefferson and State of Illinois, have invented a new and useful Brake-Shoe; of which the following is a specification.

My invention relates to brake-shoes, and has for its object to provide a shoe of that class which is so connected to the brake-bar as to adapt it to be removed from operative position when not in use, the connection between the shoe and the swinging or link frame by which attachment is made to the brake-bar being adapted to allow rocking movement to enable the shoe to adjust itself to the position of the contiguous portion of the wheel, particularly as the bearing-surface of the shoe becomes worn.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of a brake-shoe constructed in accordance with my invention. Fig. 2 is a longitudinal vertical section of the shoe, showing in dotted lines the inoperative position of the same. Fig. 3 is a detail perspective view of the swinging or link frame detached.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

Mounted upon a brake-bar 5 is a swinging or link frame 8, having a front transverse spindle arranged in bearing-loops 6 on the upper surface of the brake-bar, the side arms of said swinging or link frame being adapted, when the latter is in operative position, to rest upon the upper surface of the brake-bar. The side arms of the swinging frame are provided at their rear ends with enlargements 9, forming depending ears, of which the front sides are vertical or perpendicular to the lower edges of the side arms to bear against the rear edge of the brake-bar for a purpose hereinafter explained, and said enlargements are connected by a transverse rear spindle 3, upon which is mounted the brake-shoe 1, said rear spindle being spaced from the rear edge of the brake-bar or at a greater distance from

the fulcrum of the frame than said rear edge of the brake-bar in order to allow the brake-shoe to rock independently of the brake-bar and swinging frame to adjust its bearing-surface to the position of the contiguous portion of the wheel. In the construction illustrated the brake-shoe is provided in its rear side with an open-sided bearing 2 for the reception of the transverse rear spindle and is covered by a bearing-plate 10. The bearing-surface of the brake-shoe is made flat in order to increase its durability or the length of the time during which it is effective, but it is obvious that as the bearing-surface becomes worn and concaved by the frictional contact of the rim of the wheel the brake-shoe will adapt itself by rocking upon the rear spindle 3 to the contiguous portion of the surface of the tire and thus insure an efficient contact under all conditions.

It is desirable to avoid bringing the face of the brake-shoe into contact with the wheel in an inclined or angular position, whereby the upper or lower end of the bearing-surface may receive more wear than the other, and hence I have mounted the brake-shoe at its center upon the spindle 3, whereby it is adapted to rock in both directions with equal facility to insure a central or intermediate contact of the bearing-surface with the wheel. The contact of the vertical front sides of the enlargements or ears 9 with the rear side of the brake-bar relieves the spindle 7 and bearings 6 from strain when the brake is in operation. Furthermore, the spindle 3 connects the ears 9 at a point below the plane of the upper surface of the brake-bar, whereby pressure against the same is transferred to the front edge of the brake-bar instead of to the spindle 7, by which the frame is connected to the brake-bar.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

The combination with a brake-bar, of a swinging frame pivotally mounted upon said bar and having side arms adapted to rest upon the upper surface thereof, said side arms

being provided at their rear ends with enlargements forming depending ears having vertical front edges to bear against the rear side of the brake-bar, a spindle connecting  
5 said depending ears below the plane of the upper surface of the brake-bar and arranged at an interval from the rear edge of the brake-bar, and a brake-shoe fulcrumed at its center upon said spindle with its front side out  
10 of contact with the brake-bar whereby it is free to rock in either direction from a verti-

cal position to insure a central bearing of its surface upon the periphery of a wheel, substantially as specified.

In testimony that I claim the foregoing as  
15 my own I have hereto affixed my signature in the presence of two witnesses.

JOHN L. WICKS.

Witnesses:

E. C. ATKINS,  
M. B. ATKINS.