

No. 856,186.

PATENTED JUNE 4, 1907.

C. P. SMITH.
BRAKE HEAD AND SHOE.
APPLICATION FILED MAR. 16, 1907.

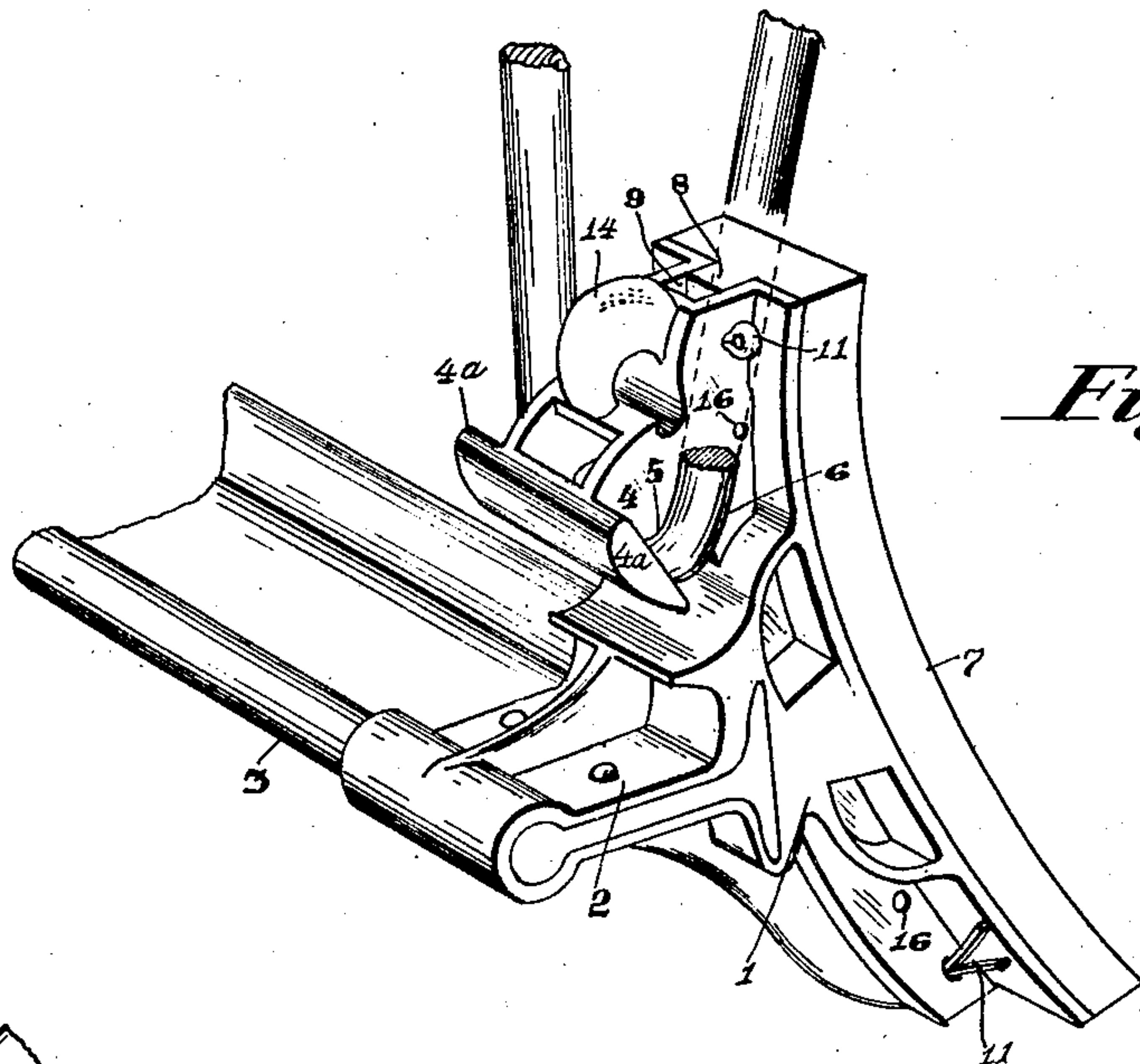


Fig. 1.

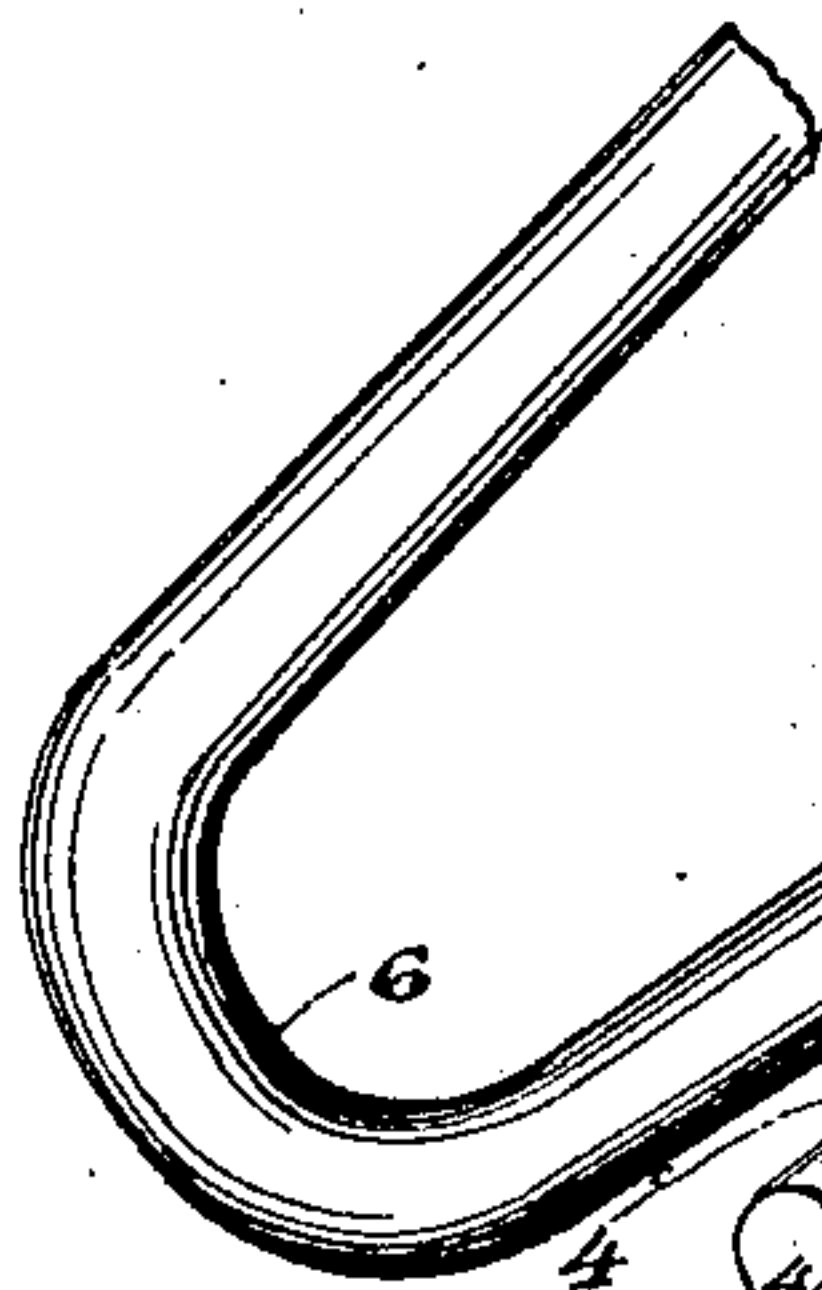


Fig. 3

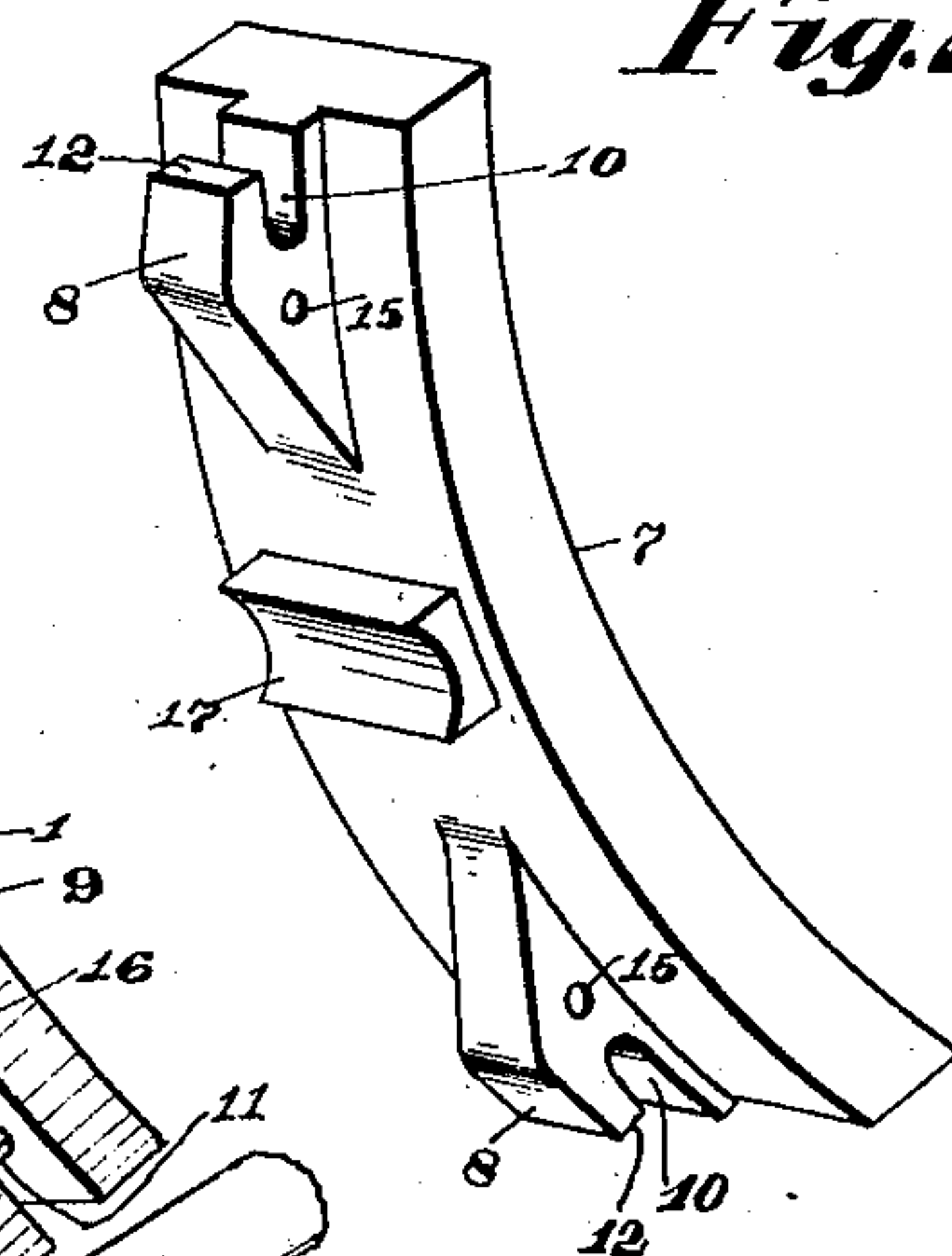
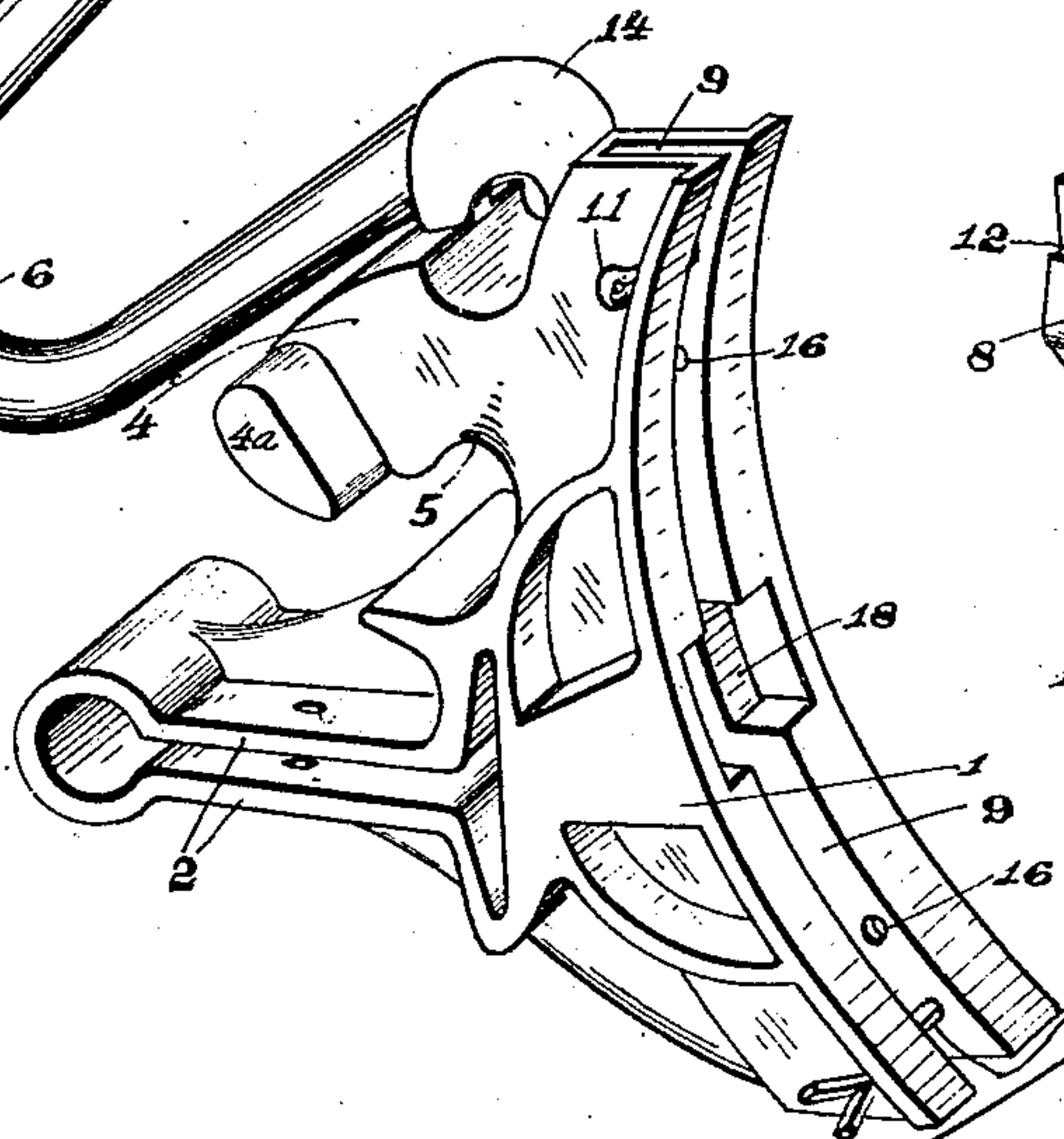


Fig.2.

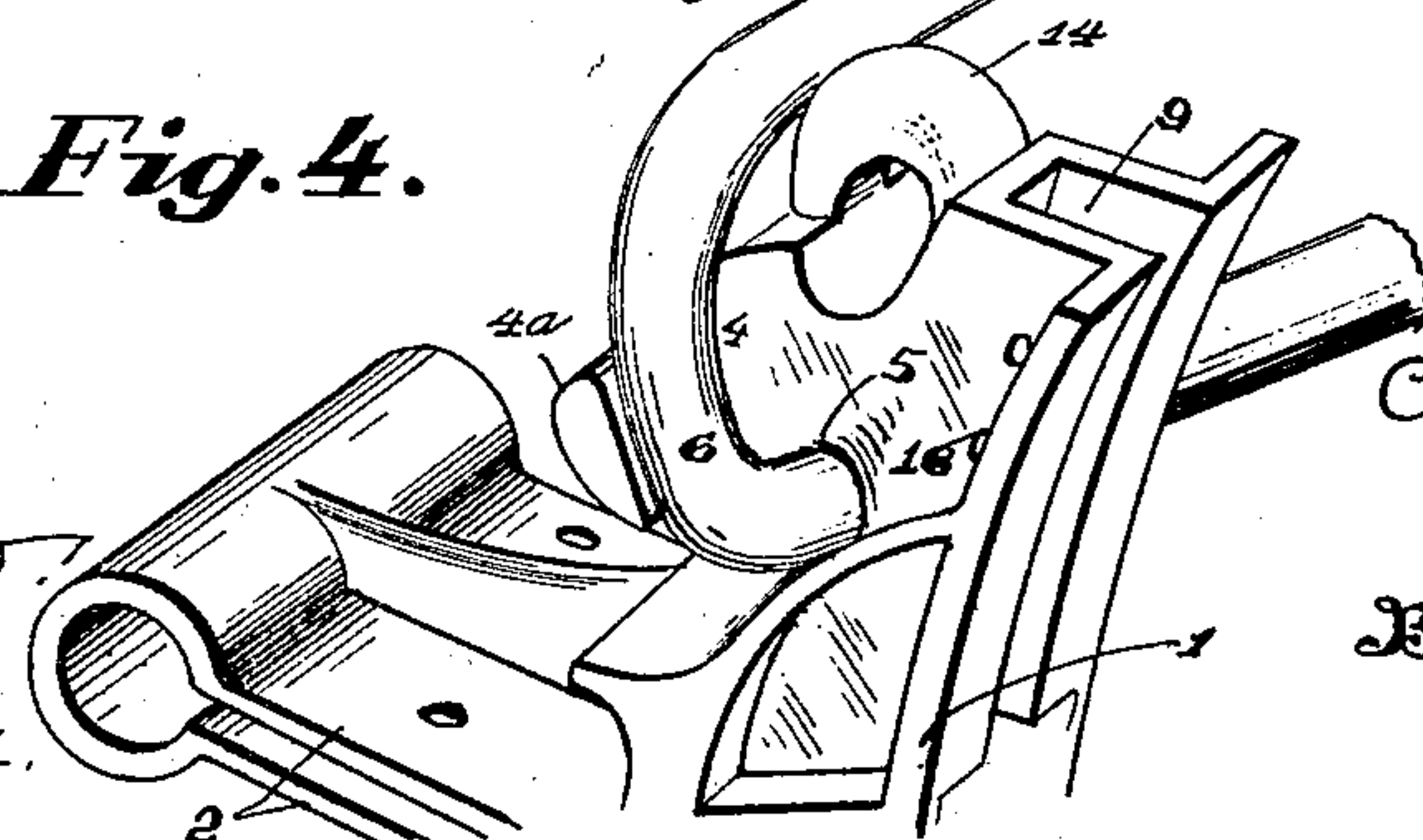


Fig. 4.

Inventor

Charles P. Smith.

Witnesses
Harry O. Rastetter
Sylvia Boron.

By *H. W. Bond*
Attorney

UNITED STATES PATENT OFFICE.

CHARLES P. SMITH, OF CANTON, OHIO.

BRAKE HEAD AND SHOE.

No. 856,186.

Specification of Letters Patent.

Patented June 4, 1907.

Application filed March 16, 1907. Serial No. 362,758.

To all whom it may concern:

Be it known that I, CHARLES P. SMITH, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Brake Heads and Shoes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification, and to the numerals and figures of reference marked thereon, in which—

Figure 1 is a view showing the brake shoe and head connected together and the hanger properly connected thereto, also showing the head connected to the brake-beam. Fig. 2 is a detached view of the brake shoe. Fig. 3 is a detached view of the brake-head showing the hanger detached. Fig. 4 is a view showing a portion of the brake-head and illustrating the hanger partially connected to the brake-head.

The present invention has relation to the brake-head and shoe and hanger therefor, and it consists in the novel arrangement hereinafter described and particularly pointed out in the claims.

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

In the accompanying drawing, 1 represents the brake-head, which is provided with the beam connecting flanges 2, which flanges are formed of such a shape that their contact faces will fit the brake-beam 3.

In the drawings I have illustrated the flanges 2 formed to fit what might be termed an I brake beam, but it will be understood that any other form of brake-beam may be used.

On the top or upper portion of the brake-head and above the connecting flanges 2 is located the rearward extending flange or arm 4, which arm is curved downward so as to form the hanger recess 5, which hanger recess is adapted to receive the bottom or lower end of the hanger 6 as best illustrated in Fig. 1.

It will be understood that the hanger is to be connected to the car truck in such a manner that it can swing when the brake shoe 7 is moved to and from the periphery of the car wheel upon which the brake shoe is to come in contact and to be released from contact. The brake-head 1 is concaved to correspond with the curvature of the brake shoe 7.

For the purpose of providing a means for securely connecting the brake shoe 7 to the brake head 1 the notched flanges 8 are formed upon the back of the brake shoe 7, which flanges enter the recess 9. It is well understood that brake-shoes must necessarily be frequently removed from the brake-head for various causes and for the purpose of removing brake shoes and replacing the same or others, the flanges 8 are provided with the notches 10, which notches allow for the passage of the cotters 11, and when the cotters 11 are placed in the position illustrated in Fig. 1 the shoe will be securely connected to the head by means of the arms 12.

It will be understood that it is not necessary to remove the upper and lower cotters to remove the shoe 7, but when one of the cotters is removed the shoe can be detached by an endwise movement of the shoe with reference to the head.

It frequently happens that when a brake-shoe becomes detached from any cause from the brake-head that the head is liable to become detached from the hanger and drop upon the road-bed and in order to provide for this emergency and prevent any dropping of the head in case it becomes detached, or is in case of any undue movement of the head together with the brake-beam the rearward extending flange 4 is provided with the lateral lugs 4^a which will engage the hanger 6 and prevent any displacement of the hanger, except when the hanger is brought into what might be termed a horizontal position or at right angles to its normal position and when brought into a horizontal position or in the position illustrated in Fig. 4 the hanger can be detached from the head. It will also be understood that the hanger must be brought into the position illustrated in Fig. 4 to properly connect said hanger to the head. The lower end of the hanger is rounded as illustrated and is so rounded or curved for the purpose of engaging the rounded edges of the rearward extension 4, thereby preventing any rapid wear as between the hanger and the extension or arm 4.

I have not illustrated the top or upper end of the hanger but it is constructed in the usual manner. In some instances it may be desired to connect a hanger to the extreme top or upper end of the head and for the purpose I provide the usual connecting loop 14. If desired the flanges 8 may be provided with the apertures 15, and the head provided with

the apertures 16, thereby providing a means for connecting the shoe 7 to the heads in common use. It will be understood that the back of the shoe 7 should be provided with the rib 17, which rib is seated in the recess 18.

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

1. In a brake-head and shoe consisting of a
10 brake-head provided with a rearward extending flange, said rearward extending flange provided with lateral lugs, brake beam connecting flanges spaced from the rearward extending flange and a hanger
15 adapted to be connected to the rearward extending flange and a shoe detachably connected to the brake head, substantially as and for the purpose specified.

2. In a brake-head and shoe, the combination of a brake beam and a brake head means
20 for attaching the brake-head to the brake-beam, said head provided with a slot or way, a brake shoe provided with notched flanges, said notched flanges adapted to be seated in
25 the groove or way of the brake-head, said brake head provided with a rearward and downward extending arm, said rearward and downward extending arm provided with lateral lugs, substantially as and for the purpose
30 specified.

3. In a brake-head and shoe, a brake head and a brake beam, a brake shoe detachably connected to the brake head, said brake head provided with a rearward and downward extending arm, said arm adapted to receive a
35 hanger, said hanger provided with a rounded contact portion for engagement with the rearward extending arm and the rearward extending arm provided with curved portions upon its bottom or under side, substantially as and for the purpose specified.

4. In a brake-head and shoe, the combination of a brake-head, a brake shoe provided with notched flanges, cotters adapted to connect the brake-head and shoe together, said
45 brake-head provided with a rearward extended arm, said rearward extended arm provided with lateral flanges, a hanger adapted to support the brake-head and the lower portion of the hanger located under the rearward extended arm and intermediate the lateral flanges and the body of the brake-head,
50 substantially as and for the purpose specified.

In testimony that I claim the above, I have hereunto subscribed my name in the
55 presence of two witnesses.

CHARLES P. SMITH.

Witnesses:

JOHN H. SPONSELLER,
F. W. BOND.