

No. 733,433.

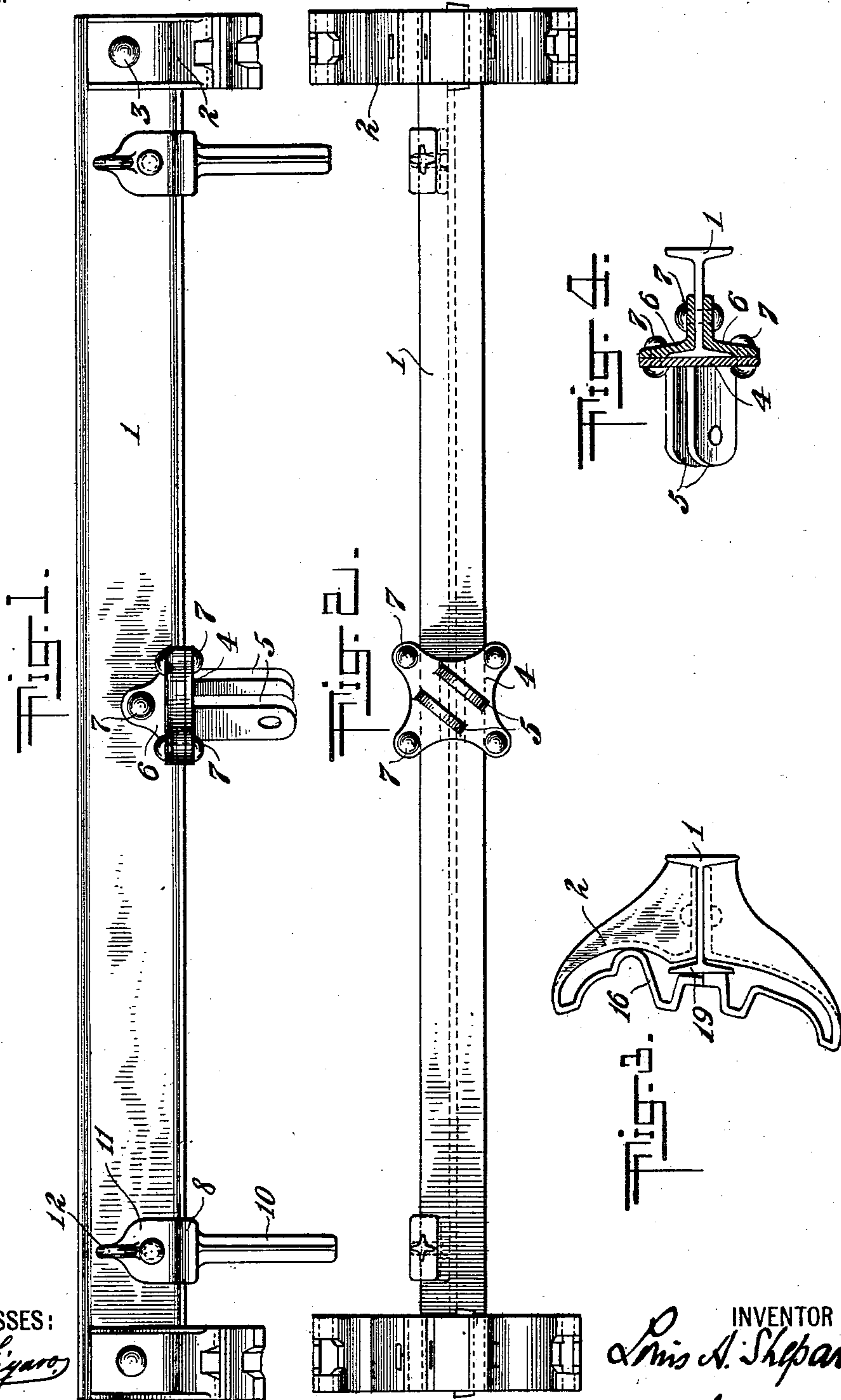
PATENTED JULY 14, 1903.

L. A. SHEPARD.
BRAKE BEAM.

APPLICATION FILED OCT. 3, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:
Charles Figaro
Deo Golden

INVENTOR
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ATTORNEYS

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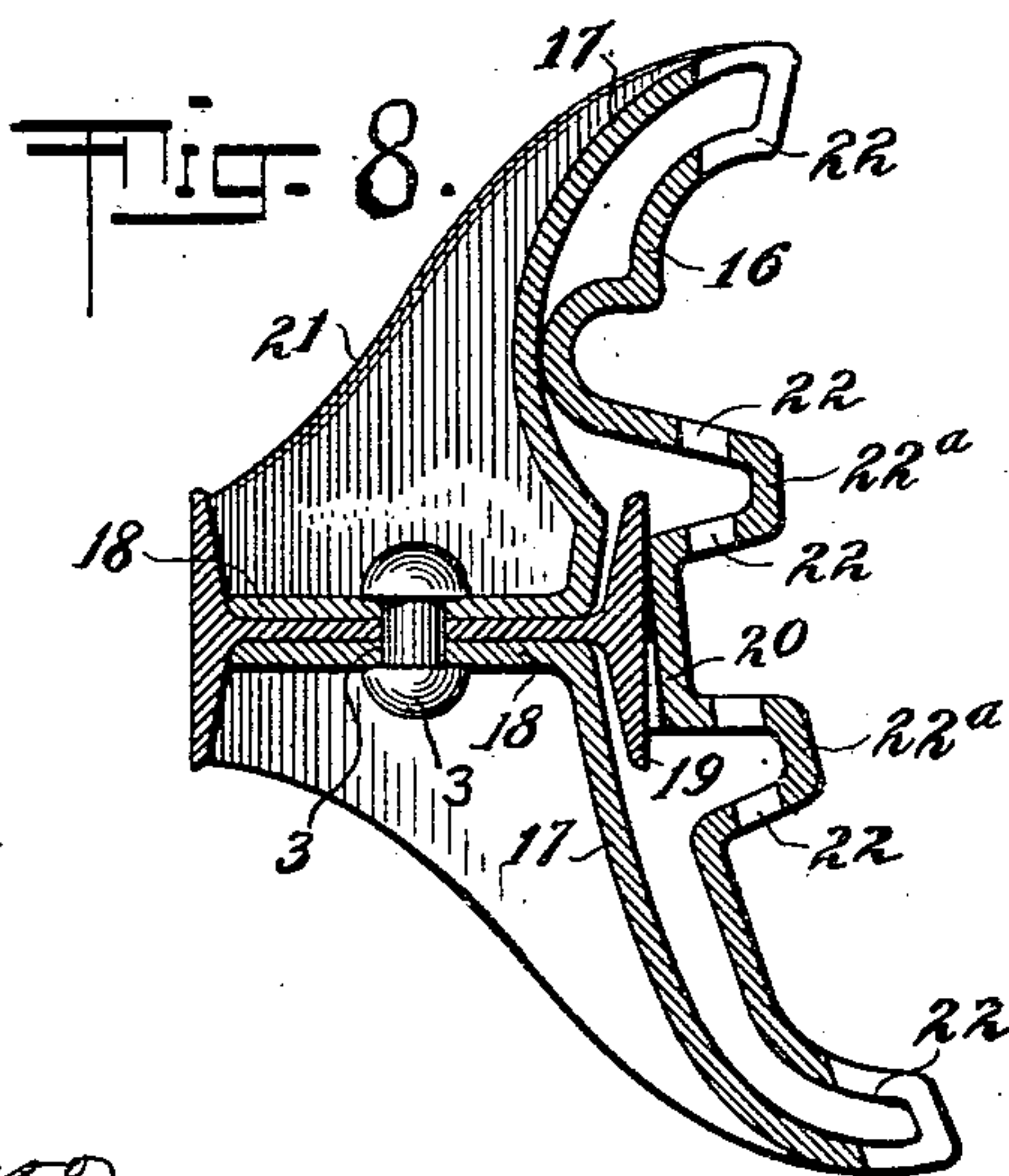
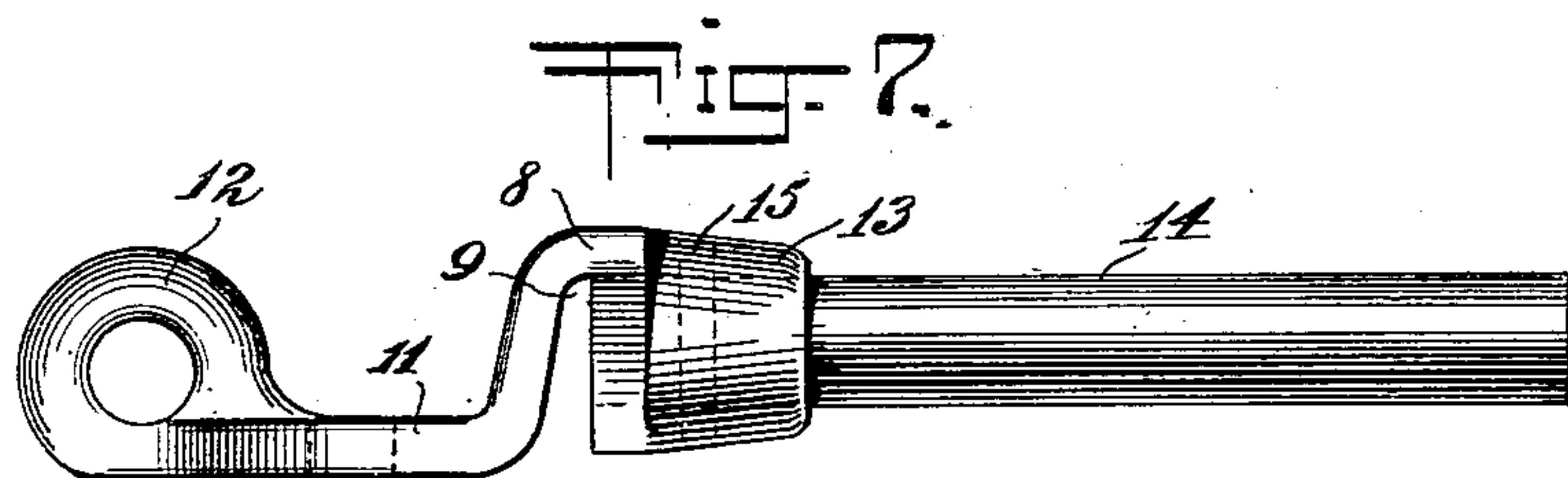
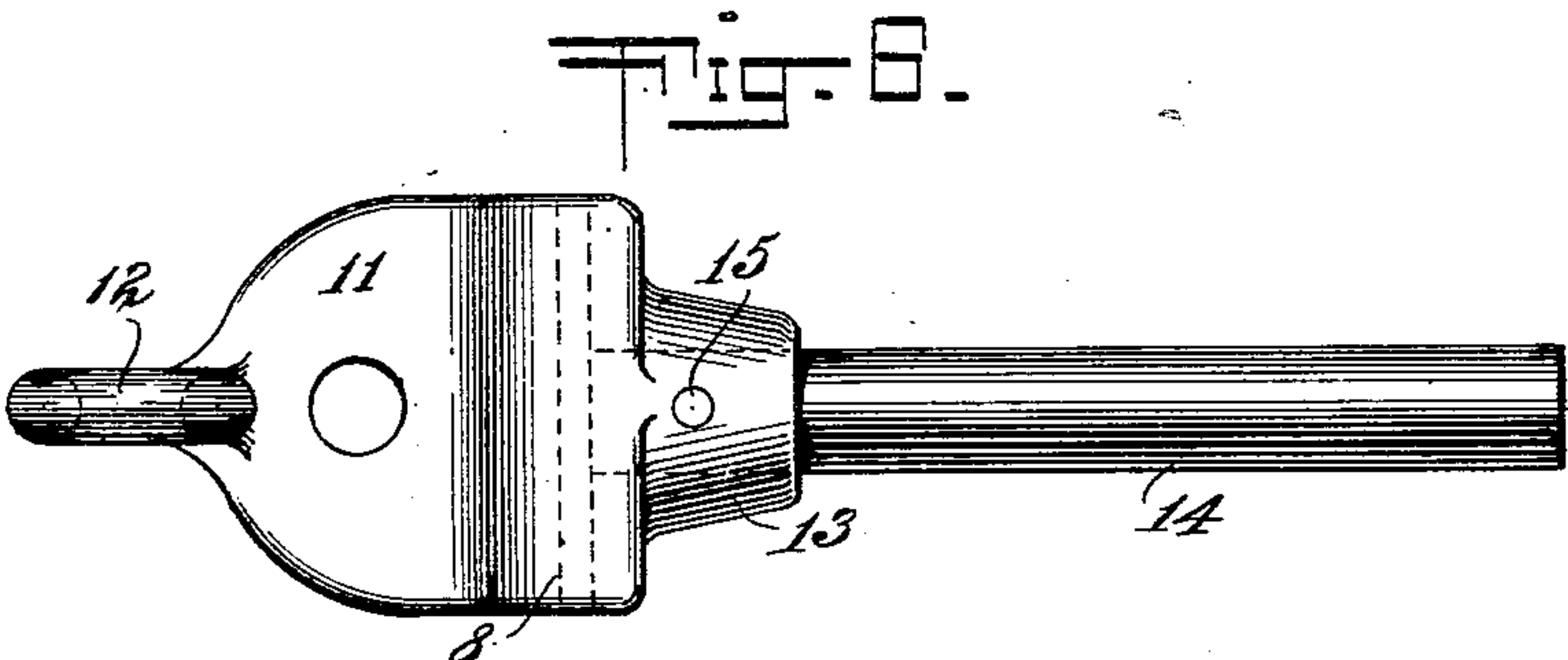
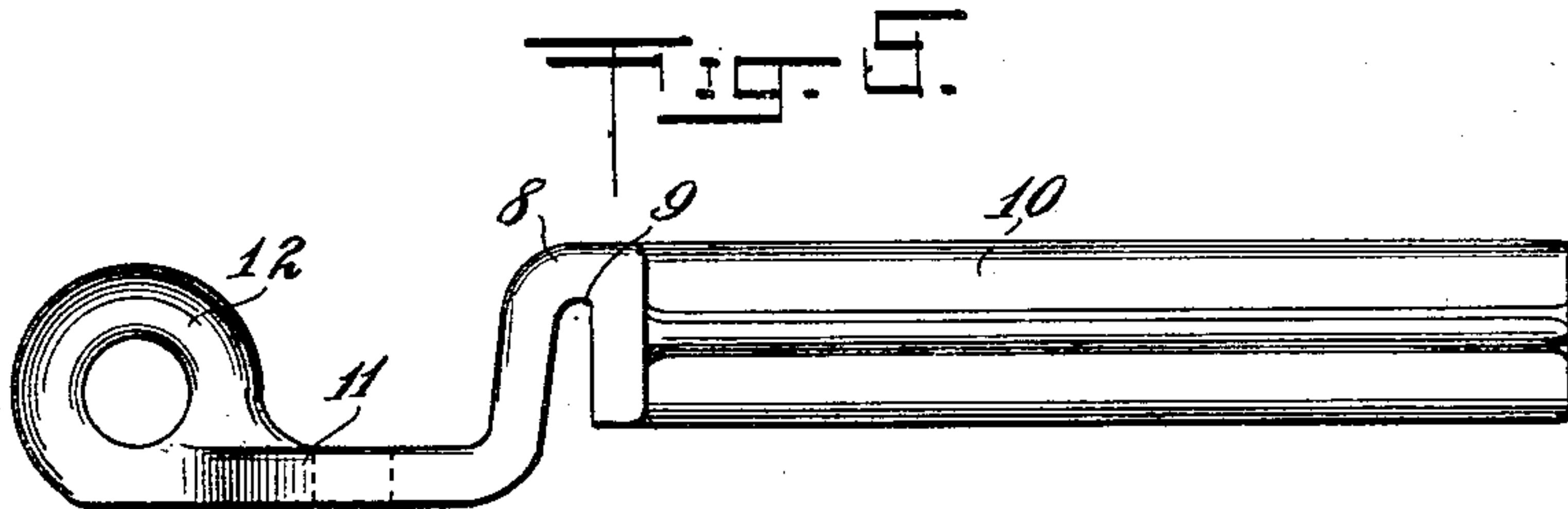
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WITNESSES:

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UNITED STATES PATENT OFFICE.

LOUIS A. SHEPARD, OF BROOKLYN, NEW YORK, ASSIGNOR TO CORNELIUS VANDERBILT, OF NEW YORK, N. Y.

BRAKE-BEAM.

SPECIFICATION forming part of Letters Patent No. 733,433, dated July 14, 1903.

Application filed October 3, 1902. Serial No. 125,745. (No model.)

To all whom it may concern:

Be it known that I, LOUIS A. SHEPARD, a citizen of the United States, and a resident of the borough of Brooklyn, city and State of New York, have invented certain new and useful Improvements in Brake-Beams, of which the following is a specification.

My invention relates to brake-beams of the type in which the main body of the beam is a flanged beam, preferably of rolled metal, although pressed or cast metal may be used, and the brake-heads are fitted upon or secured to the beam by rivets or other means. It is desirable that the fulcrum should be capable of being firmly secured to or removed from such a beam at any time without necessitating the removal of the brake-heads. I have therefore provided a fulcrum of novel structure to meet this requirement. I have also provided a brake-head of novel construction.

My invention also comprises an improved form of wheel-guard and safety-chain hanger.

In the accompanying drawings, Figure 1 is a plan, Fig. 2 a front view, Fig. 3 an end view, and Fig. 4 a central transverse section, of my improved brake-beam. Fig. 5 is a detail view of the wheel-guard. Figs. 6 and 7 are detail views of a modified form of wheel-guard, and Fig. 8 is a central vertical section through the brake-head.

1 is a flanged metal beam to whose ends are secured the brake-heads 2 by rivets 3.

The fulcrum comprises a flat plate 4, having arms or jaws 5 integral therewith and forming a fork for the reception and attachment of the brake-lever. In order to secure the piece 4 to the beam 1, I provide the angular securing-blocks 6, which are so shaped that one portion rests upon the face of the web of the beam 1 and the other portion engages the flange of the beam 1 and that portion of the plate 4 which extends beyond said flange. The rivets 7 are then inserted, as shown, in order to bind the parts firmly together and to the beam 1. The fulcrum thus formed is simple in construction and easy to apply or remove from the beam without necessitating the removal of the brake-heads. When secured by means of the rivets 7, the parts 4 and 6 closely surround and rigidly clamp the forward flange of the beam.

The combined wheel-guard and safety-hanger (see Figs. 5 to 7) comprises a body portion 8, which is provided with a groove or recess 9 for the reception of the forward flange 19 of the flanged beam 1. The portion 10, projecting forward from the body portion 8 and preferably integral therewith, performs the function of a wheel-guard. A securing-flange 11 extends rearward from the grooved body portion 8 and is riveted through the web of the beam 1. The flange 11 is provided with an eye 12 integral therewith for the attachment of the safety-chain. The wheel-guard 10 may either be integral with the body portion 8, as in Fig. 5, or I may form the part 8 with a socket 13, into which a rod 14 may be inserted and secured by means of a pin 15, as in Figs. 6 and 7.

The brake-head 2 comprises a forward shoe-holding web 16 and rear supporting-webs 17, which are united at one end with the ends of said forward web and extend therefrom toward the web of the beam 1, being spaced apart from said web 16, as shown. The free ends of the webs 17 are provided with securing-flanges 18, which are adapted to receive between them the web of the beam 1 and be tightly clamped thereto by the rivet 3. The forward flange 19 of the beam 1 is received between the webs 16 and 17 and abuts against ears or shoulders 20 upon the web 16. If desired, however, the web itself may be so shaped that that portion of its rear surface to which the ears 20 are united abuts against the flange 19. The webs 17 and flanges 18 are preferably braced and strengthened by walls or flanges 21, shown integral therewith. The web 16 is provided with ridges 22 and apertures 22 for the reception of a key for locking the brake-shoe in position upon the web 16. A brake-head of the form described is cheap and easy to construct. It is very strong and at the same time very light.

What I claim, and desire to secure by Letters Patent, is—

1. A brake-beam comprising a flanged beam, a fulcrum-block, having a flat base in engagement with the outer surface of the flange of the beam, and fork-pieces at right angles thereto, and angular securing-blocks, clamped in engagement with opposite faces of the web

of the beam and in engagement with portions of the rear face of the said flat base which extend beyond the said flange, substantially as described.

5 2. The combination of a flanged brake-beam and a brake-head, said brake-head comprising a forward web held in engagement with the flange of the brake-beam, and a rear, supporting-web spaced apart from said forward
10 web and secured to said brake-beam, substantially as described.

3. A brake-head comprising a forward, shoe-holding web, and a rear, supporting-web spaced apart therefrom and having lateral, strengthening walls or flanges, substantially
15 as described.

4. A brake-head comprising a forward, shoe-holding web, and a rear, supporting-web spaced apart therefrom and having a rearwardly-extending, securing web or flange, sub-
20 stantially as described.

5. A brake-head comprising a forward, shoe-holding web, rear, supporting-webs spaced apart therefrom and having rearwardly-extending, securing-flanges adapted to receive
25 between them the web of a brake beam, substantially as described.

6. A brake-head comprising a forward, shoe-holding web, and rear, supporting-webs, integral therewith at top and bottom, and separated therefrom at intermediate points, sub-
30 stantially as described.

7. A brake-head comprising a forward, shoe-holding web, and a rear, supporting-web

spaced apart therefrom, the latter web having
35 a rearward extension adapted to be secured in engagement with a brake-beam, substantially as described.

8. A brake-head comprising a forward, shoe-holding web, and rear, supporting - webs
40 spaced apart therefrom, the latter webs having rearward extensions adapted to receive between them the web of a brake-beam, substantially as described.

9. A brake-head comprising a forward, shoe-holding web, a rear, supporting-web spaced apart therefrom, and having lateral, strengthening walls or flanges and a rearwardly-extending, securing-flange, substantially as de-
45 scribed.

10. A brake-head comprising a forward, shoe-holding web, rear, supporting - webs spaced apart therefrom, and having lateral, strengthening walls or flanges and rearwardly-extending, securing-flanges adapted
50 to receive between them the web of a brake-beam, substantially as described.

11. In a brake-head, a shoe-holding surface, formed of a curved web bent into transverse ridges, said ridges having apertures
55 which extend through both of their walls, substantially as described.

In witness whereof I have hereunto set my hand this 1st day of October, 1902.

LOUIS A. SHEPARD.

In presence of—

EDWIN C. FARLOW,

WILLIAM K. CUCHINCLOSS.