

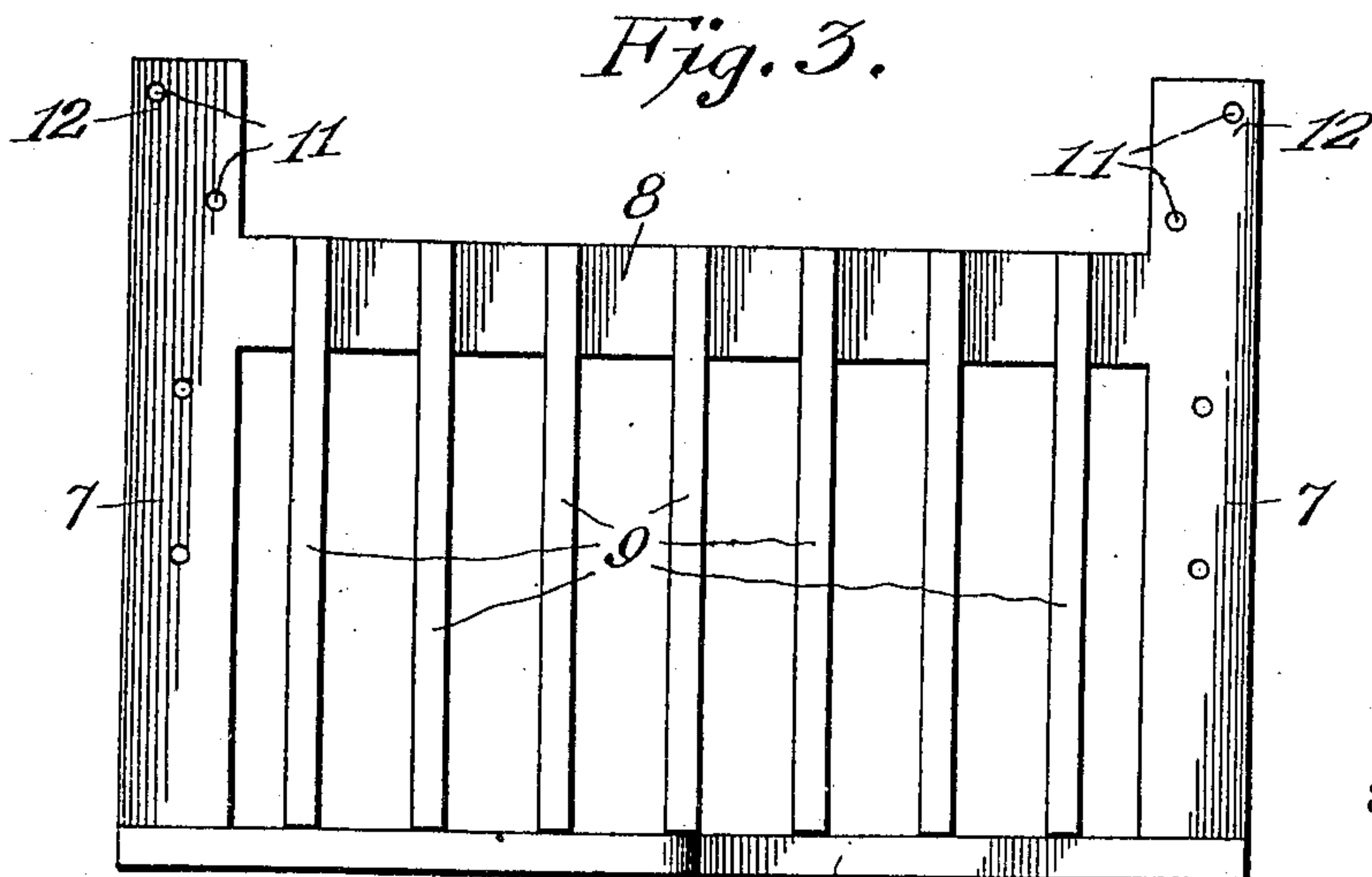
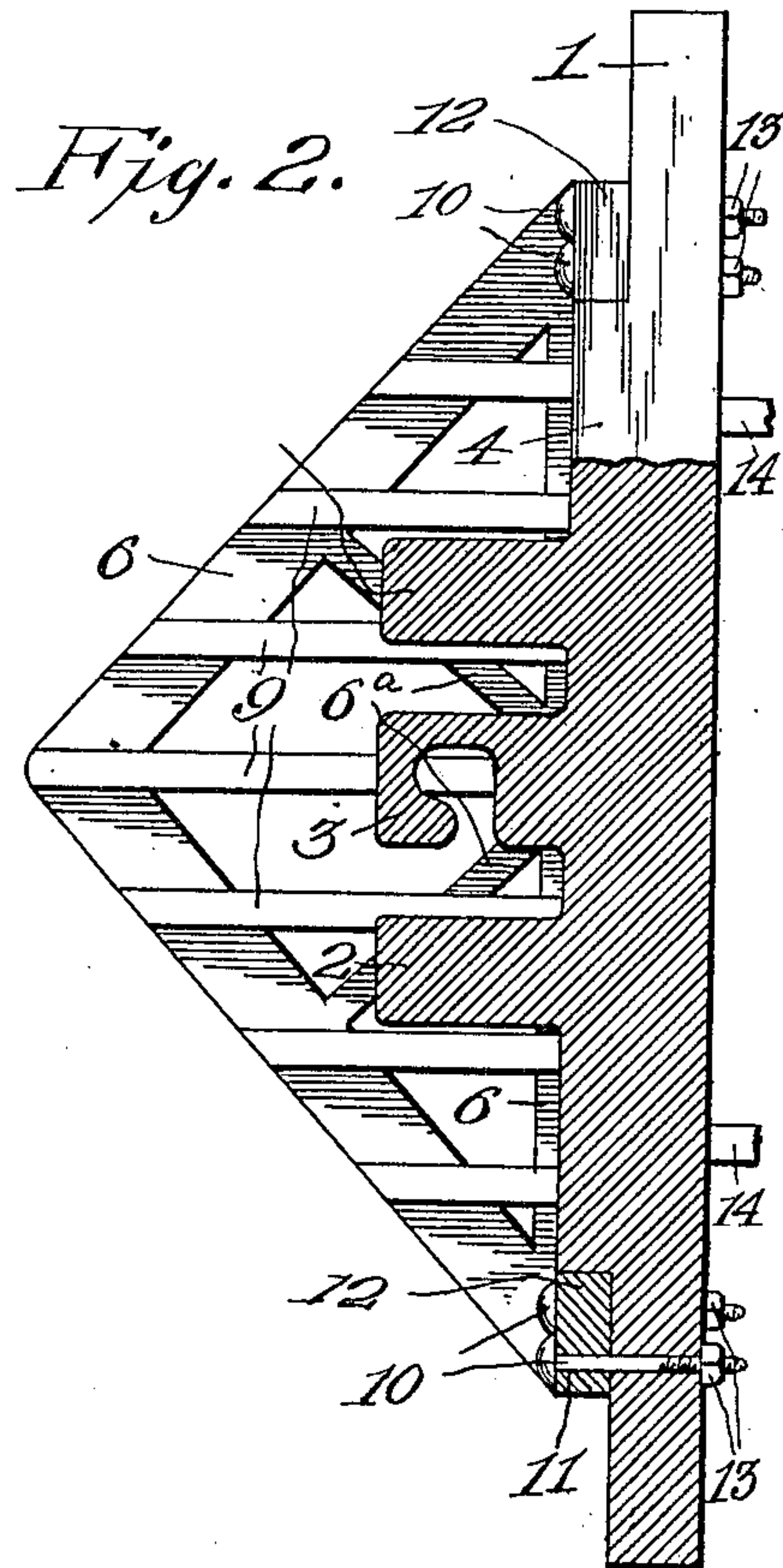
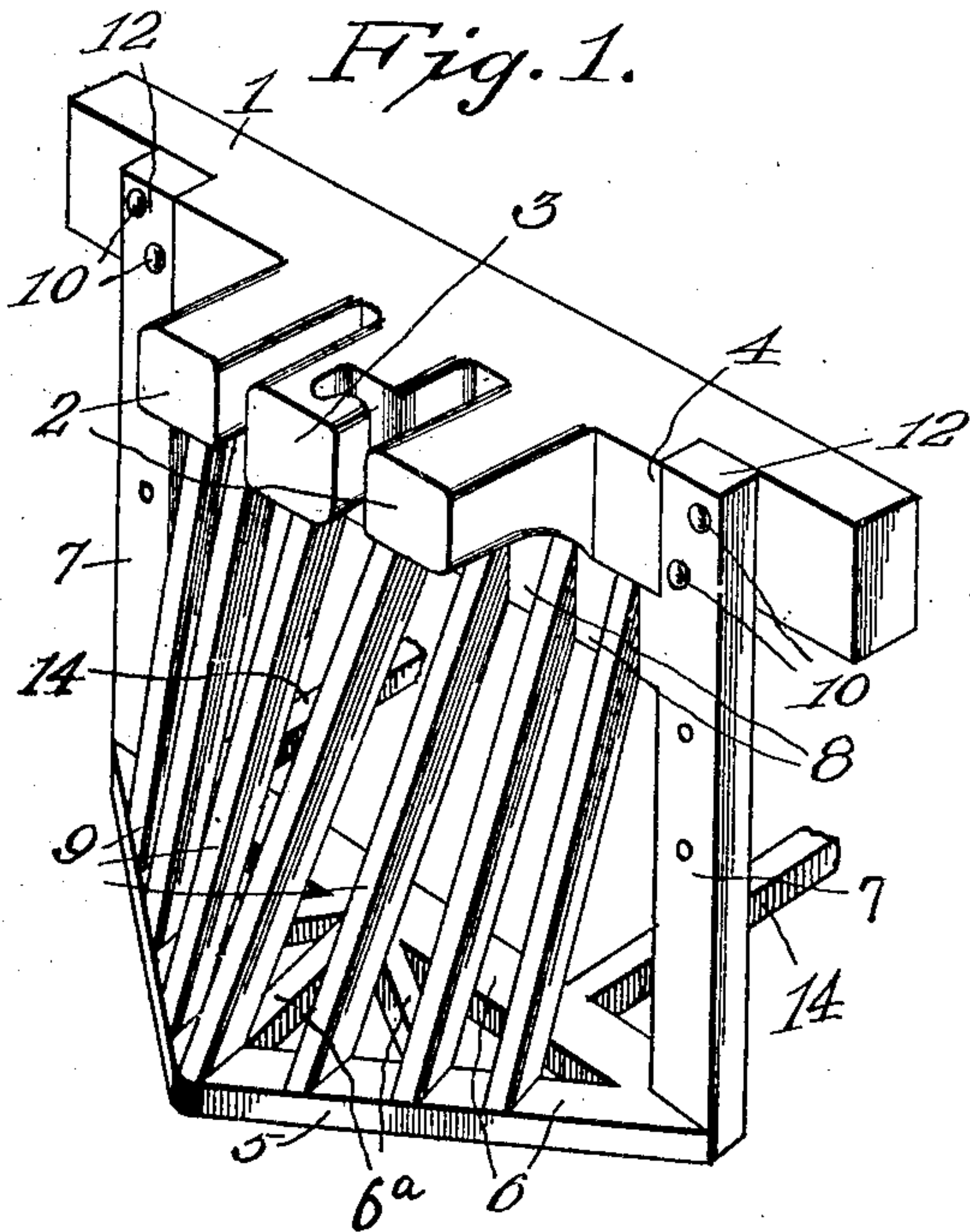
W. E. JUSTIS & A. V. LITRELL.

LOCOMOTIVE PILOT.

APPLICATION FILED AUG. 24, 1908.

913,391.

Patented Feb. 23, 1909.



Witnesses

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# UNITED STATES PATENT OFFICE.

WALTER E. JUSTIS AND ALEXANDER V. LITRELL, OF ROANOKE, VIRGINIA.

## LOCOMOTIVE-PILOT.

No. 913,391.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed August 24, 1908. Serial No. 449,962.

*To all whom it may concern:*

Be it known that we, WALTER E. JUSTIS and ALEXANDER V. LITRELL, citizens of the United States, residing at Roanoke, in the

5 county of Roanoke and State of Virginia, have invented certain new and useful Improvements in Locomotive-Pilots, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to improvements in pilots for locomotives or engines.

The object of the invention is to provide a simple and effective pilot or fender which may be quickly and easily applied to or removed from the locomotive or the like without disturbing the draw-head or other parts.

15 With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed and illustrated in the accompanying drawings, in which—

20 Figure 1 is a perspective view of the improved pilot showing it applied; Fig. 2 is a plan view with parts in horizontal section; and Fig. 3 is a front elevation of the pilot removed.

25 In the drawings 1 denotes the beam or other portion of a locomotive, engine or the like, 2 denotes the dead-heads or bumpers and 3 the draw bar or connection. Formed upon the front face of the beam or support 1 is an enlargement or projection 4 of rectangular shape and around which the improved removable pilot 5 is adapted to fit. Said pilot comprises a triangular-shaped horizontal frame or base 6 and a vertical rear frame consisting of side bars 7 rising from the base and united by an upper cross bar 8, which latter is united to the forward converging members of the base 6 by the inclined guard bars 9. The triangular-shaped base is strengthened by three converging braces 6<sup>a</sup> which extend from the forward converging members of said base to the center of its rear cross member. The upper horizontal or cross bar 8 is secured between the side bars 7 a suitable distance from the upper ends of the latter so that in the upper portion of the vertical frame of the pilot is formed a recess of the proper size and shape to receive the projection or enlargement 4 on the beam 1. By forming the enlargement 4 on the front of the upper portion of the

will have an effective engagement and support upon the beam and at the same time may be readily applied to and removed from said beam.

60 When in position upon the beam the pilot is secured by means of bolts 10 which extend through the beam adjacent to the ends of the enlargement 4 and which have their threaded ends projecting through openings 65 11 formed in the projecting upper ends 12 of the side bars or standards 7 of the pilot. Retaining nuts 13 are applied to the projecting threaded ends of the bolts to retain the pilot upon them. Other bolts than the two 70 numbered 10 may be provided for uniting the upper portion of the removable pilot to the cross beam. The lower end of the removable pilot may be strengthened by rearwardly extending braces 14 connected at 75 their front ends to the rear member of the triangular-shaped base of the pilot and at their rear ends to the engine frame.

From the foregoing it will be seen that the pilot may be quickly and easily applied 80 to or removed from the locomotive, engine or the like without disturbing its draw-head or dead-heads and that its application and removal may be quickly accomplished with very little labor.

85 Having thus described the invention what is claimed is:

1. In a device of the character described, the combination with a transverse beam having a forwardly projecting rectangular enlargement upon its front face, of a pilot having at its top a recess to receive said enlargement and to provide the projecting upper ends 12 to engage the front face of the beam and the ends of said enlargement, and the removable fastenings uniting said upper ends 12 to the beam.

2. In a device of the character described, the combination with a transverse beam having a forwardly projecting rectangular enlargement upon its front face, of a pilot consisting of a triangular-shaped open base frame with converging braces arranged therein, a vertical rear frame having upright side bars united by a horizontal upper bar, and upwardly and rearwardly inclined guard bars arranged between said upper horizontal bar and the front portions of the triangular base frame, said upper horizontal bar being adapted to engage the bottom of the enlargement on the transverse beam and arranged below the upper ends of the up-

right side bars, whereby the latter will engage the ends of said enlargement and the front face of the transverse beam, removable fastenings uniting the upper ends of the  
5 side bars to the transverse beam and braces connected to the base frame of the pilot.

In testimony whereof we hereunto affix

our signatures in the presence of two witnesses.

WALTER E. JUSTIS.

ALEXANDER V. LITTRELL.

Witnesses:

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