No. 696,483.

Patented Apr. 1, 1902.

J. PLAYER.

GUIDE YOKE BRACKET.

(Application filed Nov. 7, 1901.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 2.

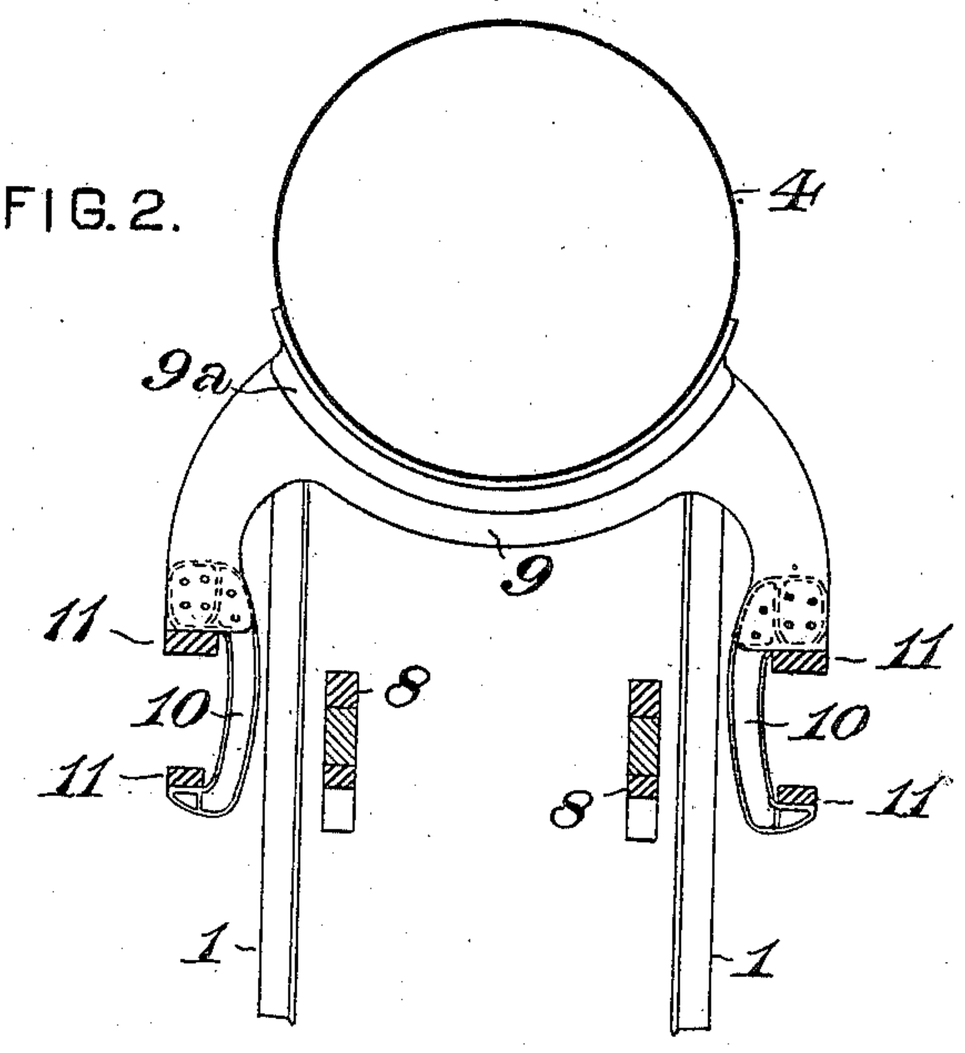

FIG. 1.

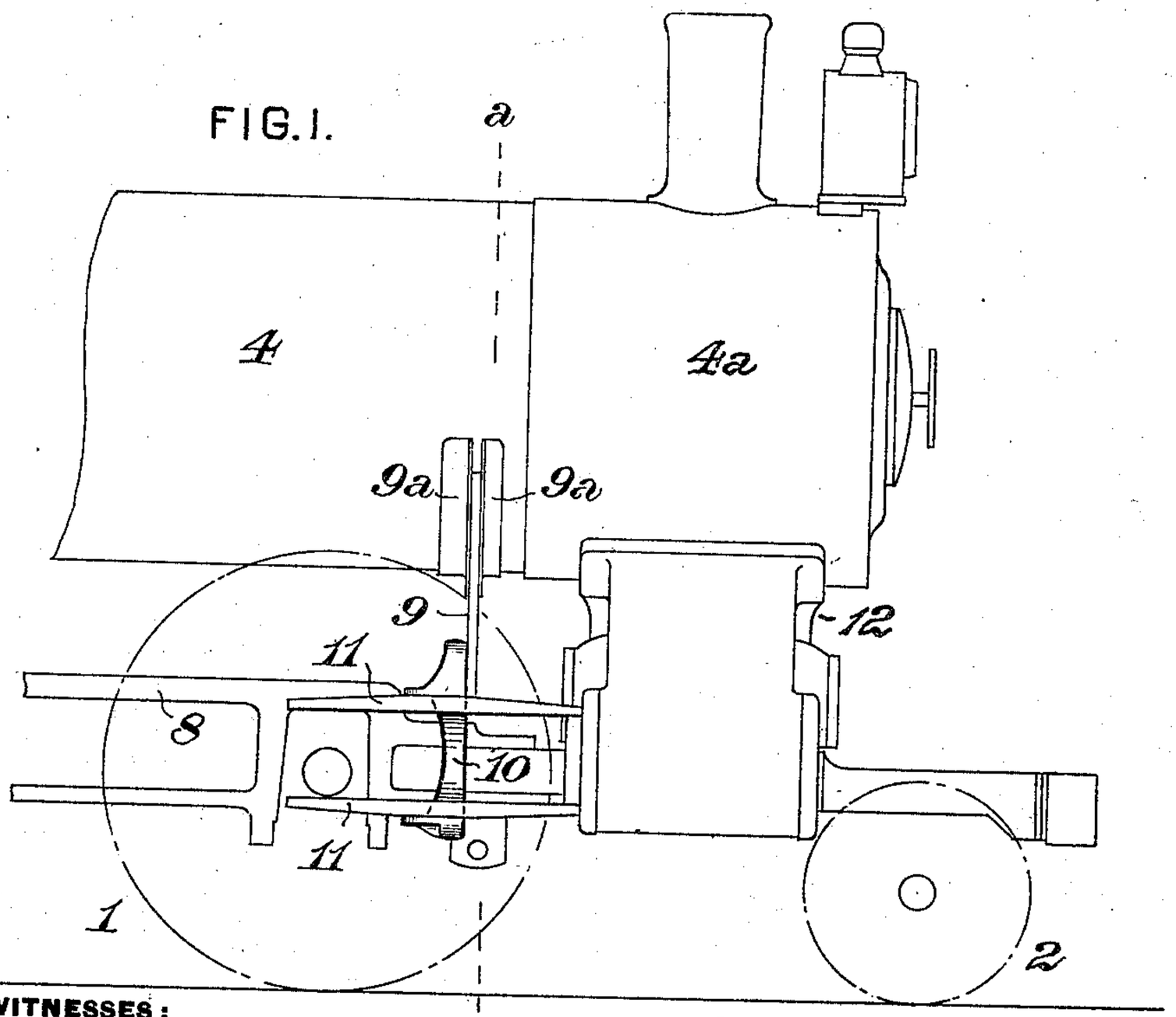

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FIG. 5.

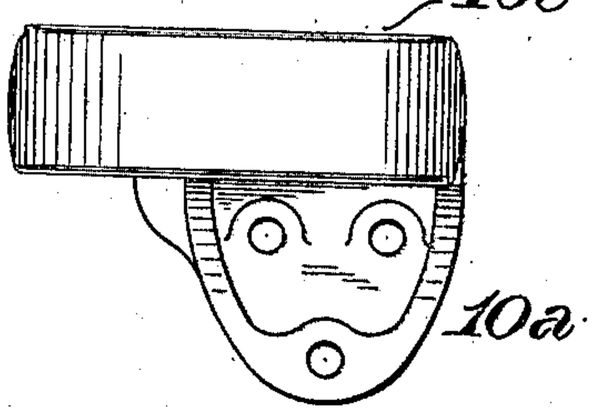


FIG. 3.

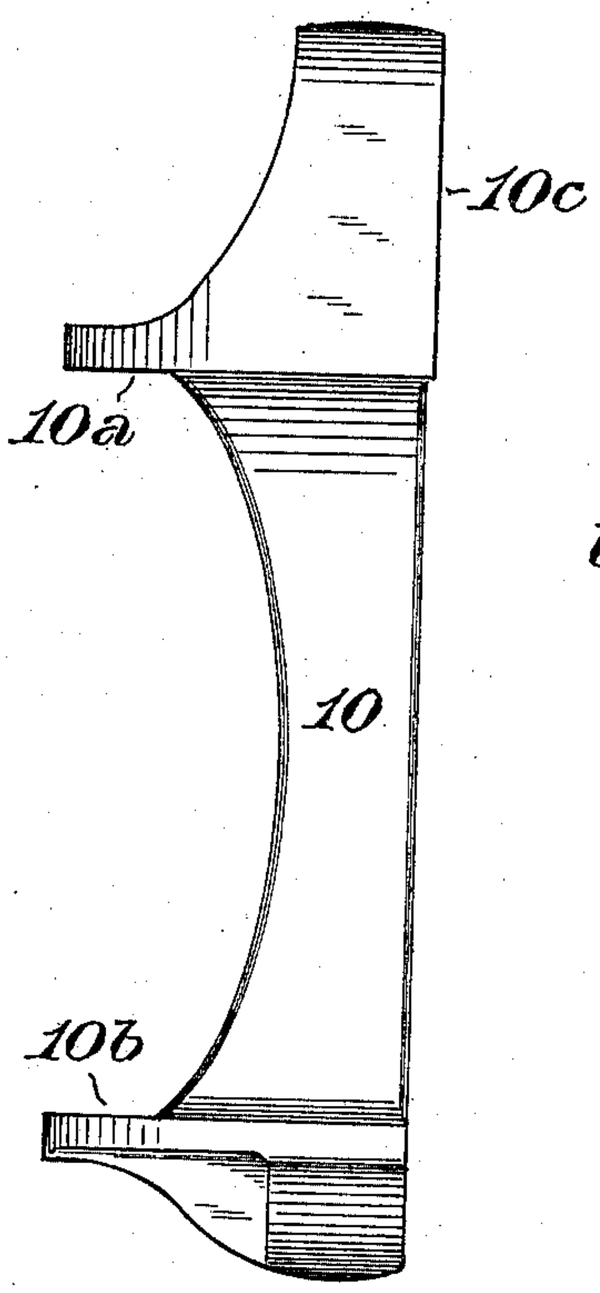


FIG. 4.

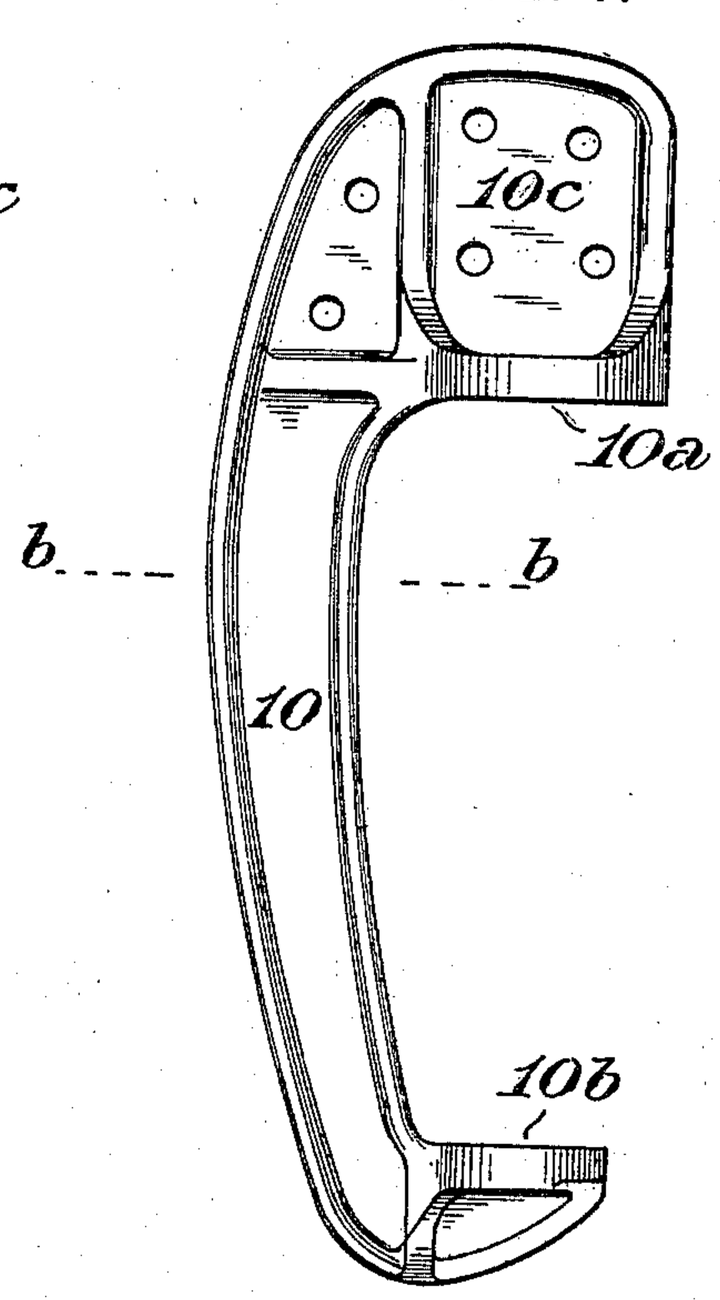
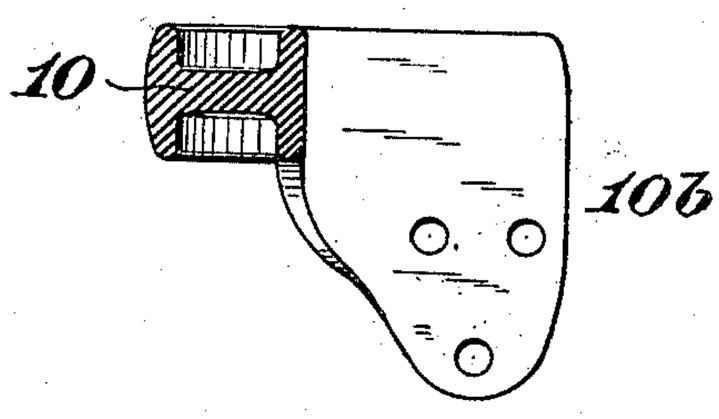


FIG. 6.



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UNITED STATES PATENT OFFICE.

JOHN PLAYER, OF CHICAGO, ILLINOIS, ASSIGNOR TO AMERICAN LOCOMOTIVE COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

GUIDE-YOKE BRACKET.

SPECIFICATION forming part of Letters Patent No. 696,483, dated April 1, 1902.

Application filed November 7, 1901. Serial No. 81,475. (No model.)

To all whom it may concern:

Be it known that I, JOHN PLAYER, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Guide-Yoke Brackets, of which improvement the following is a specification.

The object of my invention is to provide simple, strong, and inexpensive means for supporting the piston-rod guide-bars of a locomotive-engine from the boiler thereof independently of the frame.

The improvement claimed is hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a diagrammatic side view of the forward portion of a locomotive-engine with my improvement applied; Fig. 2, a vertical transverse section on the line *a a* of Fig. 1; Fig. 3, a side view, in elevation and on an enlarged scale, of a bracket detached; Fig. 4, a rear view of the same; Fig. 5, a plan or top view, and Fig. 6 a horizontal section on the line *b b* of Fig. 4.

My invention is herein illustrated as applied in connection with a locomotive-engine, which is supported on driving-wheels 1, only one pair of which is shown, and leading wheels 2, the smoke-box 4^a of the boiler 4 being connected to the frames 8 through the intermediation of cylinder-saddles 12 in the ordinary manner.

In the practice of my invention the guide-bars 11 of each of the piston-rods of the locomotive are connected to and supported by an integral guide-yoke bracket of cast metal, (preferably steel,) having a substantially vertical body 10, on the edges of which flanges are formed, so that it shall be of channeled cross-section, an upper horizontal flange 10^a, a lower horizontal flange 10^b, and an upper vertical flange 10^c. The upper and lower flanges are preferably, as shown, stiffened by edge and intermediate flanges or ribs. The bodies of the guide-yoke brackets stand on the inside of the guide-bars—that is, between said bars and the frames and the upper one of the guide-bars 11 on each side of the engine is bolted to the upper horizontal flange 10^a of one of the brackets through a suitable number of bolt-holes formed therein, and the lower guide-bar is similarly connected to the lower guide-bar 10^b. A guide-yoke 9, having downwardly-depending lateral arms, is secured to one of the waist-sheets of the boiler 4 in a transverse plane intersecting the guide-bars 11 at any desired point in their length, the connection of the guide-yoke to the boiler-sheet being preferably made through angle-irons 9^a, bolted or riveted to its opposite sides and riveted to the boiler-sheet, and the lateral arms of the guide-yoke are bolted to the vertical flanges 10^c of the brackets.

Under the above-described construction the guide-bars are supported directly by the boiler independently of the frame members, and, as in the type of locomotive shown, may be supported at a point in their length at which a direct connection of the guide-bars to the frames could not be made by reason of the interposition of a pair of driving-wheels. It will be seen that the brackets may be made of ample strength without being of undue or excessive size or weight and that the guide-bars may be readily put in place and taken down, as required, by the ordinary manipulation of their bolt-and-nut connections with the guide-yoke.

I claim as my invention and desire to secure by Letters Patent—

1. An integral cast-metal guide-yoke bracket for locomotive guide-bars, having a substantially vertical body, an upper horizontal flange for attachment to an upper guide-bar, a lower horizontal flange for attachment to a lower guide-bar, and an upper vertical flange for attachment to a guide-yoke.

2. An integral cast-metal guide-yoke bracket for locomotive guide-bars, having a substantially vertical body, of channeled section, ribbed upper and lower horizontal flanges for attachment to an upper and a lower guide-bar, respectively, and a ribbed upper vertical flange for attachment to a guide-yoke.

3. In a locomotive-engine, the combination of a guide-yoke secured to the boiler, upper and lower guide-bars, and guide-yoke brackets, each having an upper horizontal flange bolted to one of the upper guide-bars, a lower horizontal flange bolted to one of the lower guide-bars, and an upper vertical flange bolted to one side of the guide-yoke.

JOHN PLAYER.

Witnesses:
MARY F. LINCOLN,
EVA B. JUDD.