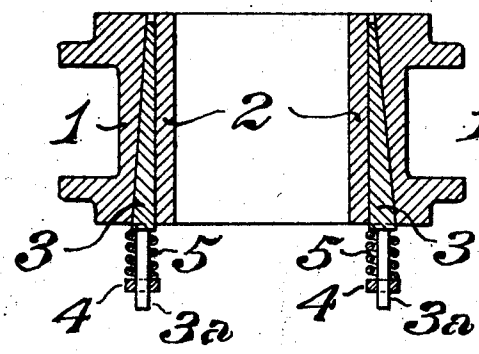
July 28, 1925. 1,547,667

A. F. PITKIN

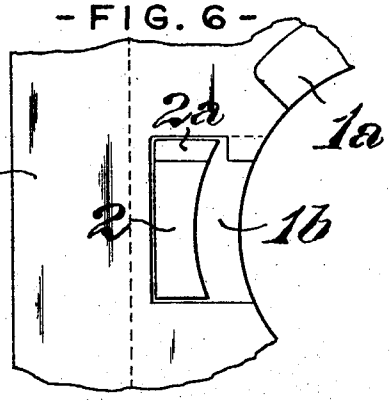
LOCOMOTIVE DRIVING BOX

Filed Aug. 11, 1923

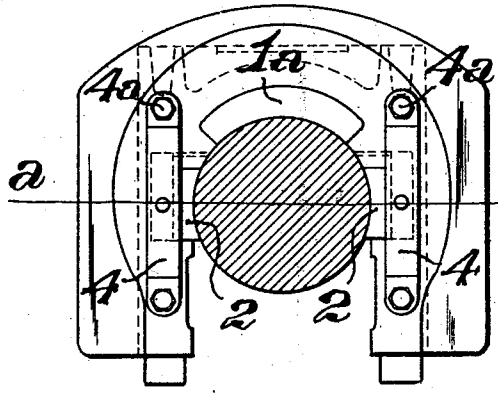
- FIG. 1 -



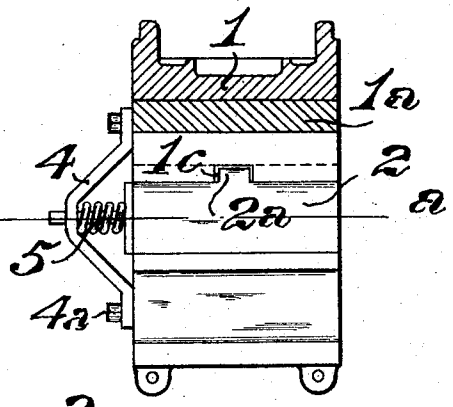
- FIG. 6 -



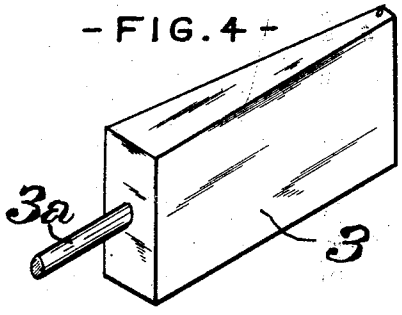
- FIG. 2 -



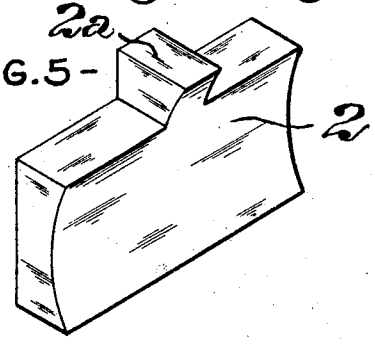
- FIG. 3 -



- FIG. 4 -



- FIG. 5 -



WITNESSES

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Patented July 28, 1925. 1,547,667

UNITED STATES PATENT OFFICE.

ARTHUR F. PITKIN, OF SCHENECTADY, NEW YORK.

LOCOMOTIVE DRIVING BOX.

Application filed August 11, 1923. Serial No. 656,846.

To all whom it may concern:

Be it known that I, ARTHUR F. PITKIN, of Schenectady, in the county of Schenectady and State of New York, have invented a certain new and useful Improvement in Locomotive Driving Boxes, of which improvement the following is a specification.

The objects of my invention are to provide, in a locomotive driving box, means whereby the longitudinal play that obtains in driving boxes of the ordinary construction, may be automatically taken up, and means for affording increased bearing surface below the centre of the axle.

The improvement claimed is hereinafter fully set forth.

In the accompanying drawing: Figure 1 is an axial section through a locomotive driving box, illustrating an application of my invention, on the line *a a* of Figs. 2 and 3; Fig. 2, a rear view, in elevation, of the same; Fig. 3, a vertical central section; Fig. 4, a view, in perspective, of an adjusting wedge; Fig. 5, a similar view of a side brass; and, Fig. 6, a partial end view, on an enlarged scale, showing the manner of inserting the side brasses.

In the practice of my invention, referring descriptively to the specific embodiment thereof which is herein exemplified, the driving box, 1, is fitted with a crown brass, 1^a, which is fixed in the box by being pressed thereinto, in the ordinary manner, and with side brasses, 2, which are curved in conformity with the axle journal, and are fitted in recesses, 1^b, which extend horizontally in the inner sides of the driving box, the side brasses extending both above and below the horizontal central plane of the driving axle, as most clearly shown in Fig. 2. Longitudinal movement of the side brasses, relatively to the driving box, is prevented by lugs, 2^a, formed on the tops of the side brasses, at about the middle of their length, and engaging recesses, 1^c, in the driving box, above those in which the bodies of the side brasses are fitted.

The inner sides of the driving box are, for a distance equal to the depth of the side brasses, machined on vertical planes to form the recesses, 1^b, the faces of which are inclined from the front to the rear of the box, as shown in Fig. 1, and correspondingly inclined adjusting wedges, 3, are interposed between the inclined surfaces of the driving box and the side brasses. The adjusting wedges are pressed inwardly, that is to say, towards their narrower ends, against the side brasses, 2, by springs, 5, which surround stems, 3^a, on their wider ends of the wedges, and bear on said wider ends, and on abutments, 4, secured to the rear end of the driving box by bolts, 4^a.

In the operation of a locomotive driving box in which my invention is applied, it will be seen that a material increase of bearing surface on the axle journal, is obtained by the provision of the side brasses, and that longitudinal play thereof, in the driving box, is effectually prevented by the engagement of the lugs on the tops thereof, with the driving box. Wear of said brasses is automatically taken up by the adjusting wedges, independently of the crown brass, under the constant pressure of the springs thereon. The construction is a simple and inexpensive one, and is readily adaptable, without modification of, or interference with, the usual accessories, to driving boxes of the present standard constructions.

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

In a locomotive driving box, the combination of a crown brass rigidly fitted in the box, side brasses movably fitted in the box and separated from said crown brass, central lugs on said side brasses engaging recesses in the box to prevent relative longitudinal movement of said side brasses, and spring-pressed wedge-shaped members fitted in the box behind said side brasses for taking up the wear of the latter.

ARTHUR F. PITKIN.

Witnesses:
W. S. FRAME,
D. S. COLEMAN.