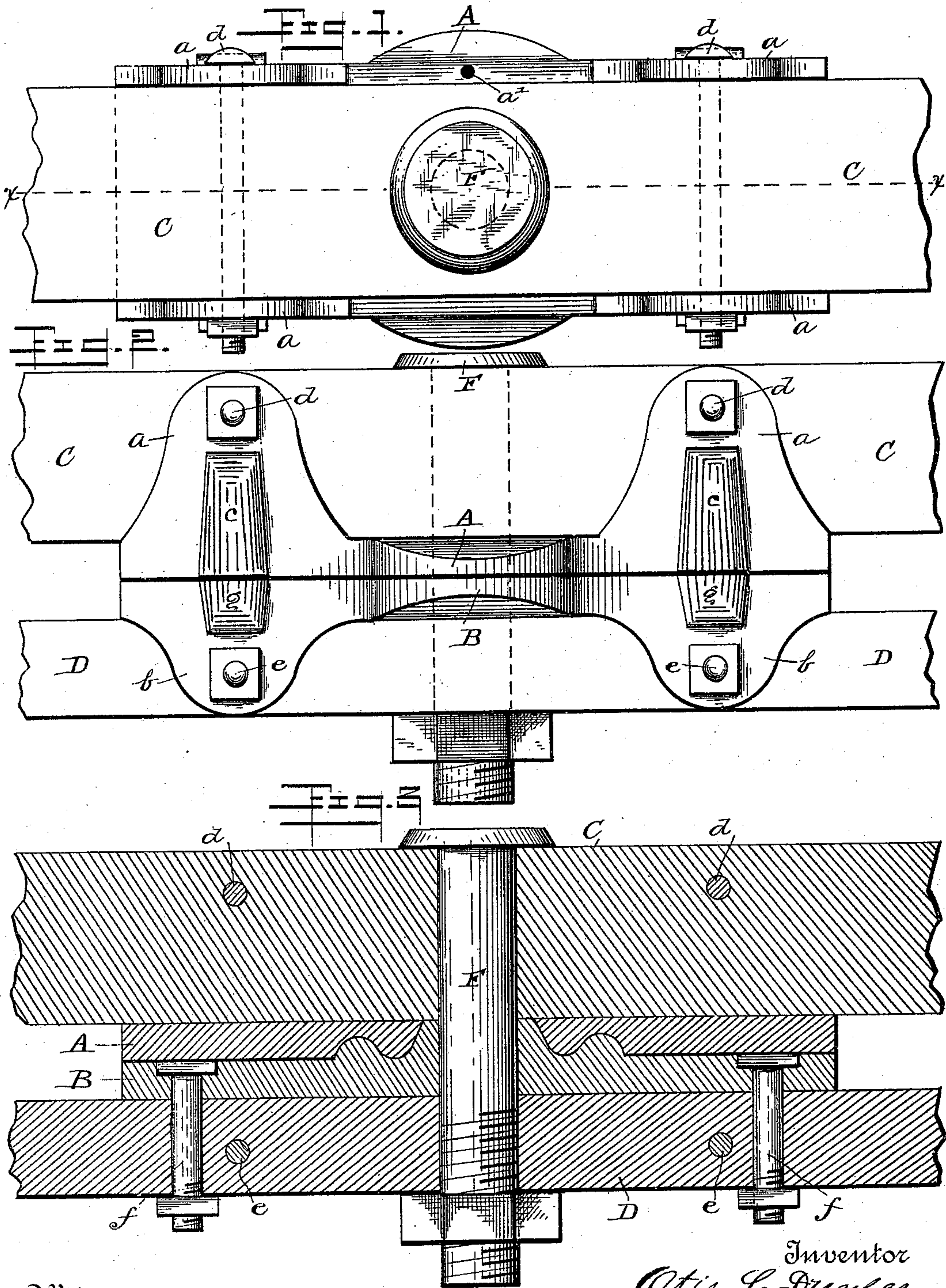


(No Model.)

O. L. DUNFEE.  
VEHICLE BOLSTER PLATE.

No. 496,249.

Patented Apr. 25, 1893.



Witnesses  
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# UNITED STATES PATENT OFFICE.

OTIS L. DUNFEE, OF MONROETON, PENNSYLVANIA.

## VEHICLE BOLSTER-PLATE.

SPECIFICATION forming part of Letters Patent No. 496,249, dated April 25, 1893.

Application filed December 22, 1891. Serial No. 415,893. (No model.)

*To all whom it may concern:*

Be it known that I, OTIS L. DUNFEE, a citizen of the United States, residing at Monroeton, in the county of Bradford and State of Pennsylvania, have invented certain new and useful Improvements in Bolster-Plates for Vehicles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in wagon bolster-plates, and consists of the peculiar construction of the plates as hereinafter described and shown, and has for its object the production of plates that better subserve the purpose for which they are used than those now in use, and also to prevent the bolsters and sand-boards to which they are attached from splitting from the strains to which they are subjected while in use.

I illustrate my invention by the accompanying drawings, in which like letters represent like parts throughout.

Figure 1, represents a top plan view of a portion of a wagon bolster with my improved bolster-plates attached thereto, and Fig. 2, represents a side view of portions of a bolster and a sand-board of a wagon with my improved bolster-plates attached thereto. Fig. 3, is a central, vertical, longitudinal section of a portion of a bolster and sand-board, and the bolster-plates thereon, showing a side view of the vertical bolts, the section being taken on line X, X, Fig. 1.

A, is a top plate secured to the bolster C.  
B, is the bottom plate secured to the sand-board D.

F, is the king-bolt.

a, a, indicate flanges or ears extending upward from the plate alongside of the bolster, and b, b, corresponding flanges extending downward from the lower plate alongside of the sand-board.

d, d, are horizontal bolts passing through the flanges a, a, and bolster C.

e, e, are horizontal bolts passing through the flanges b, b, and sand-board D.

f, f, are vertical bolts passing through the lower bolster-plate B, and sand-board D.

The view shown in Fig. 2, corresponds to that of the opposite side of my bolster plates except in one would be shown the heads, and on the opposite side the nuts, of the bolts d, e.

Each bolster-plate is cast integral with its flanges or ears. The flanges are cast slightly thicker at their middle part, giving the appearance of a raised portion at c, c, and g, g. The heads of the bolts f, f, are counter-sunk in the plate B, so that they shall be flush with its upper surface, so that the plate A, shall slide over them without friction. The plates are corrugated in a circle about the king-bolt, the upper one being a counter-part of the lower. The sides of the plates opposite the king-bolt and between the flanges project laterally in a circular form, as indicated in Figs. 1, and 2.

By reason of my flanges being constructed so wide as to extend over and beyond the surfaces of the bottom of the bolster and top of the sand-board, and by reason of being provided with the circular projections between the flanges opposite the king-bolt and the raised portions c, c, and g, g, I obtain a large flat bearing for the bolster-plates, and thus prevent the bolster from tilting as it moves backward and forth around the king-bolt, and the king-bolt is also relieved from much of the strain to which it is otherwise subjected.

By providing my upper plate A, with the flanges a, a, I am enabled to fasten it securely to the bolster by the bolts d, d, and dispense with vertical bolts through the bolster, which cause it to split.

By my means of securing the bolster C, between the flanges a, a, by the bolts d, d, I give much additional strength to the bolster and prevent it from splitting by reason of the king-bolt passing through it.

What is true of the advantages of my bolster-plate as attached to the wagon bolster, is also correspondingly true of the lower plate as attached to the sand-board of the wagon. I provide the upper bolster-plate with an oiling hole a', which communicates with the circular corrugated surface around the king-bolt, so that the plates are conveniently oiled to prevent friction.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In combination with a bolster, sand board  
5 and king bolt of a wagon, bolster plates A,  
and B, plate A having a flat upper surface on  
which the bolster rests, a central large circular  
face, flanges *a, a*, embracing bolster, said  
10 corrugated projections to engage with corre-

sponding corrugations on plate B, plate B having  
flanges to embrace the sand board, substantially  
as described.

In testimony whereof I affix my signature in  
presence of two witnesses.

OTIS L. DUNFEE.

Witnesses:

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