No. 688,667.

Patented Dec. 10, 1901.

L. J. MURPHY.

WEAR PLATE FOR SAND BOARDS.

(Application filed July 6, 1897.)

(No Model.)

Fig.1.

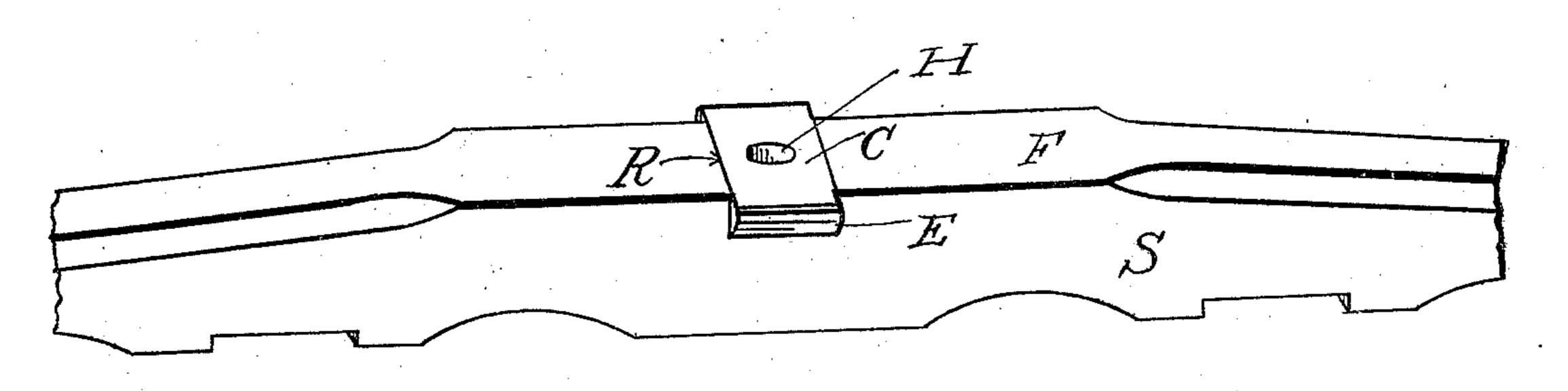
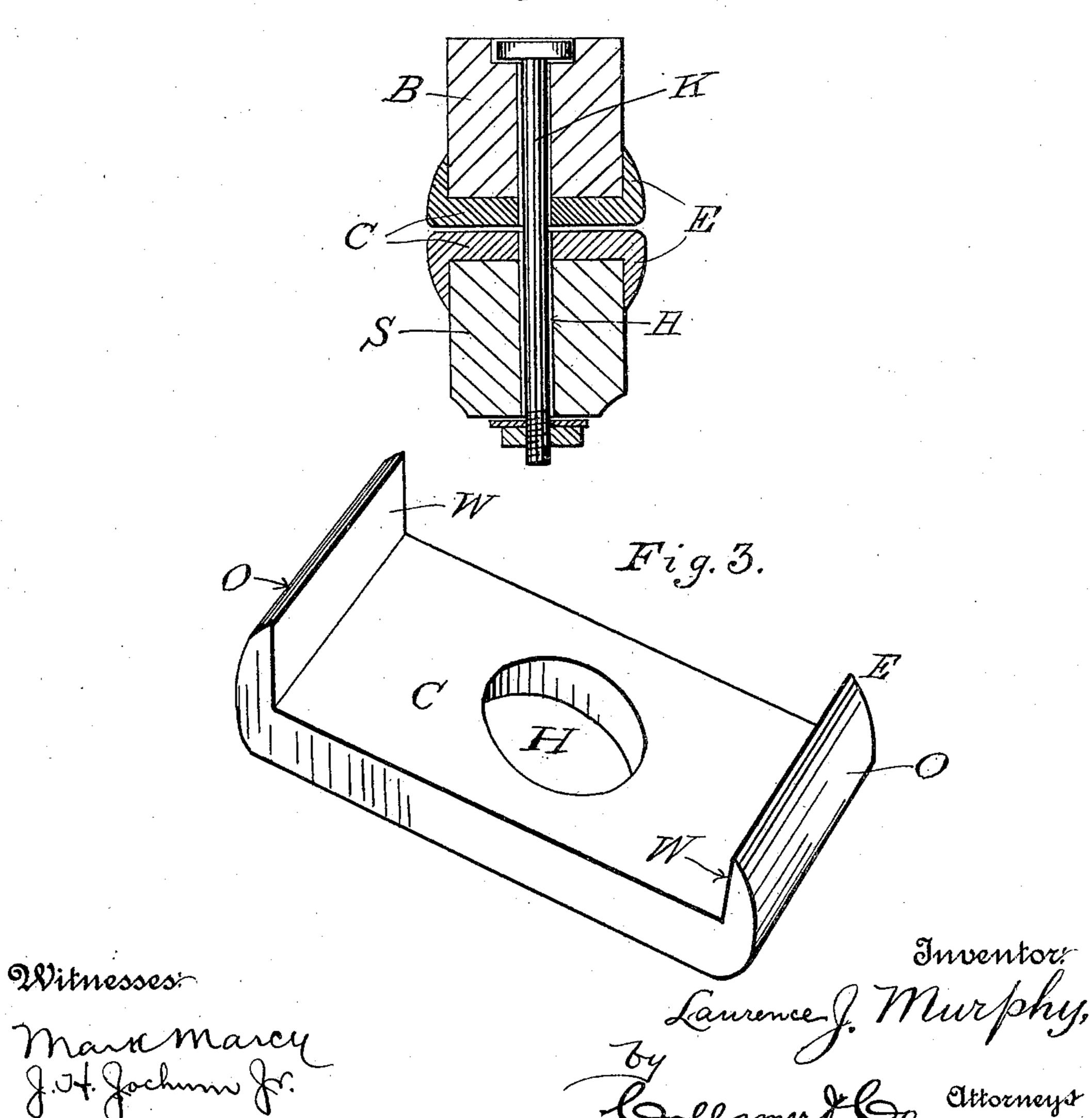


Fig. 2.



United States Patent Office.

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WEAR-PLATE FOR SAND-BOARDS.

SPECIFICATION forming part of Letters Patent No. 688,667, dated December 10, 1901.

Application filed July 6, 1897. Serial No. 643,620. (No model.)

To all whom it may concern:

Be it known that I, LAWRENCE J. MURPHY, a citizen of the United States, and a resident of Springfield, Greene county, State of Missouri, have invented certain new and useful Improvements in Wear-Plates for Sand-Boards; and my preferred manner of carrying out the invention is set forth in the following full, clear, and exact description, terminating with a claim particularly specifying the novelty.

This invention relates to carriages and wagons, and more especially to the running-gear thereof; and the object of the same is to produce certain improvements in the specific construction of the wear-plate or sand-board protector.

board protector.

To this end my invention consists in the details of construction hereinafter more fully described and claimed, and as illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the sand-board of a wagon with my improved wear-plate or protection-clip in place; and Fig. 2 is a vertical section through the bolster and sand-boards with their wear plates or clips, showing the king-bolt connecting these members.

By experience I find that where the kingso bolt passes through the bolster, axle, sandboard, &c., that portion thereof becomes
weakened and frequently splits or breaks,
and also that such board wears away quite
rapidly where the bolster contacts therewith,

washer. To prevent the spliting and wearing of the sand-board, I make use of a clip or plate C, which is provided at its ends with ears E, having straight inner walls W and preferably rounded outer walls O Said

40 preferably rounded outer walls O. Said plate is also provided near its center with a hole H to allow the king-bolt K to pass therethrough. This clip is driven frictionally into a recess R, extending across the grain of the

upper face F of the sand-board S in such position that the holes in the clip and sand-board register and the plate lies flush with the upper face of the board. The inner smooth walls W of the ears or lugs E tightly

engage the front and rear faces of the board 50 S to prevent the displacement of the clip and also to brace and strengthen the board. This clip is preferably made of malleable metal, so that in the event of its being a little longer than the width of the board to which it is to 55 be applied the ears or lugs E can easily be driven down or forced tightly inward against the faces of said board, thus having the same effect as one which fits snugly at first. I have also found by experience that an ex- 60 tended bearing between the adjacent faces of the bolster and the board upon which it rests causes a wrenching of the king-bolt, which either bends and finally breaks the same or wears the bolt-hole laterally, this 65 action resulting from the unevenness of the ground or tipping of the axle. It will be seen that with my improved clip it would be impossible for the sand-board to be split by the king-bolt, because the ears or lugs E ex- 70 tend over and rest against the faces thereof and serve to brace and bind the sand-board in a direct line with the hole through which the bolt passes. Then, too, the point of pivot of the bolster is directly around and in 75 close proximity to the bolt, and therefore the wear and friction is on one face of the metal clip only, and consequently, as the metal surface surrounds the bolt, it will not wear as readily as the wooden surface. I also place 80 one of these clips in the same manner in the under surface of the bolster B, so as to surround the king-bolt; but, if desired, this one may be omitted.

What is claimed as new is—
A sand-board for wagons provided with a hole for the king-bolt and a recess extending transversely across its upper face, a metallic clip having a hole to register with that in the board, said clip having a body longer than 90 the width of the board and adapted to enter the recess therein and its upper face to then lie flush with the upper face of said board, and depending ears at the ends of the clipbody provided with rounded outer walls and 95 flat inner walls adapted to be forced into frictional engagement with the side faces of the board below the extremities of said re-

cess; combined with a bolster located above the sand-board, and a like clip located and frictionally held in reverse position within a similar recess in the under side of the bolster, its flat lower face resting upon the flat upper face of the clip in the sand-board, as and for the purpose set forth.

In testimony whereof I have hereunto subscribed my signature on this the 2d day of July, A. D. 1897.

LAWRENCE J. MURPHY.

Witnesses:

A. T. QUISENBERRY, GEO. H. BOOTH.