

(No Model.)

C. E. DURYEA.

SHOVELING BOARD FOR WAGONS.

No. 344,259.

Patented June 22, 1886.

Fig. I.

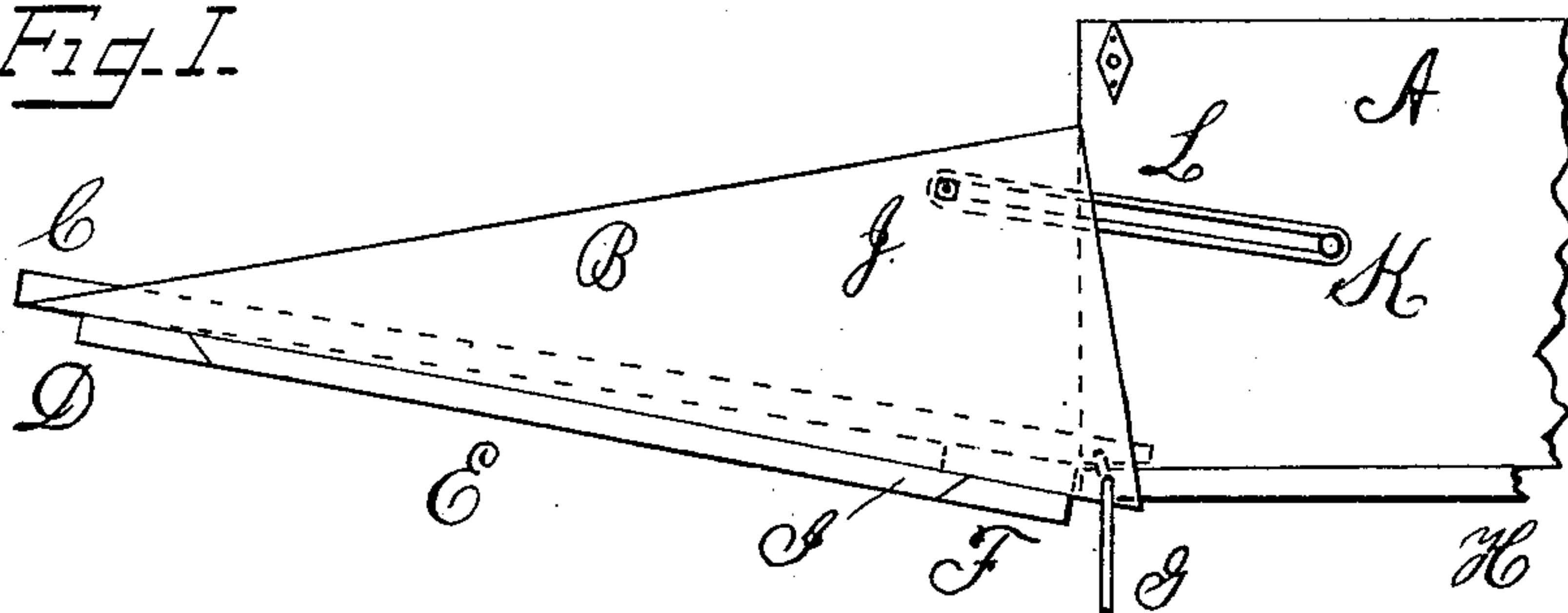


Fig. III.

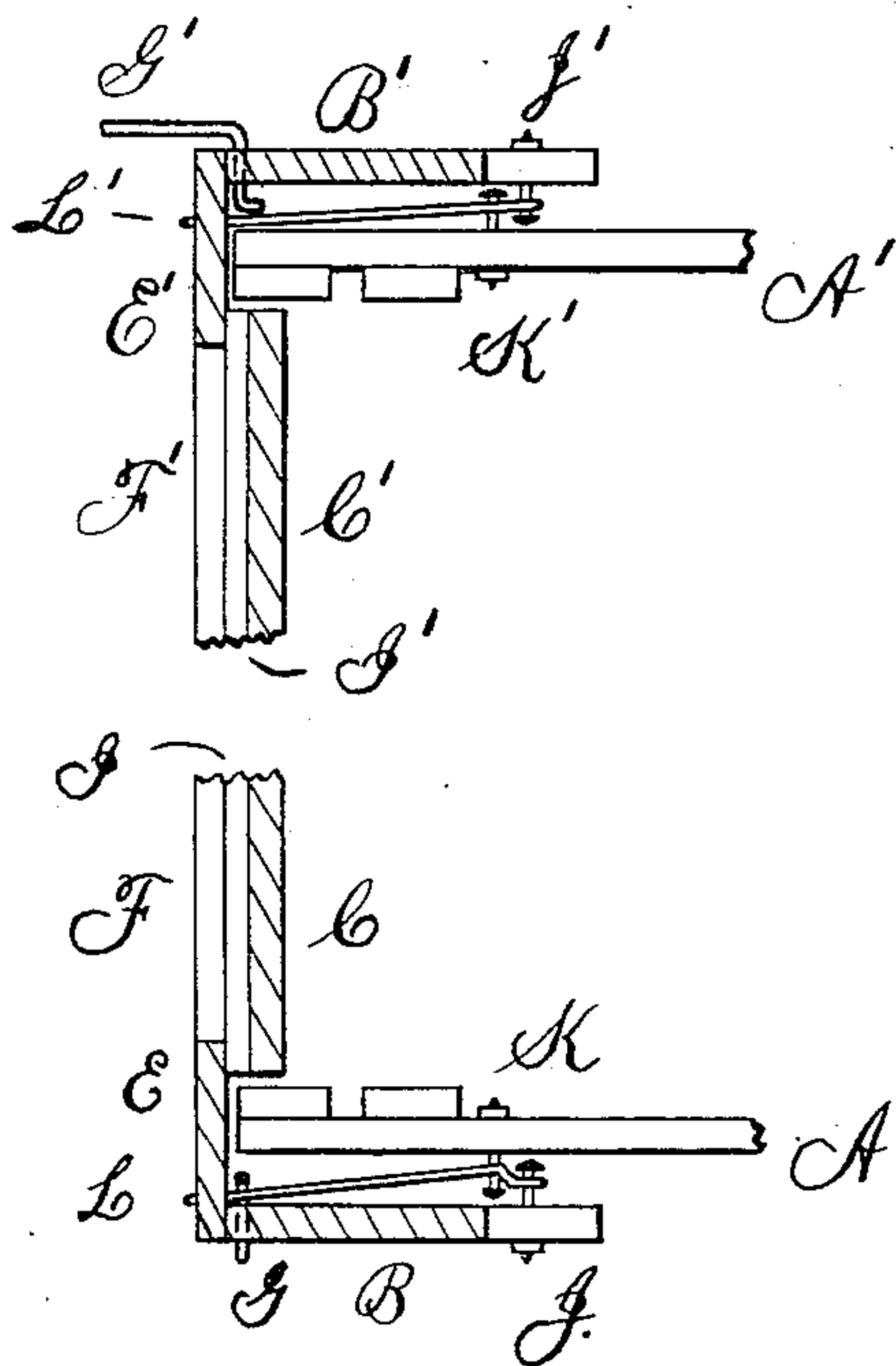
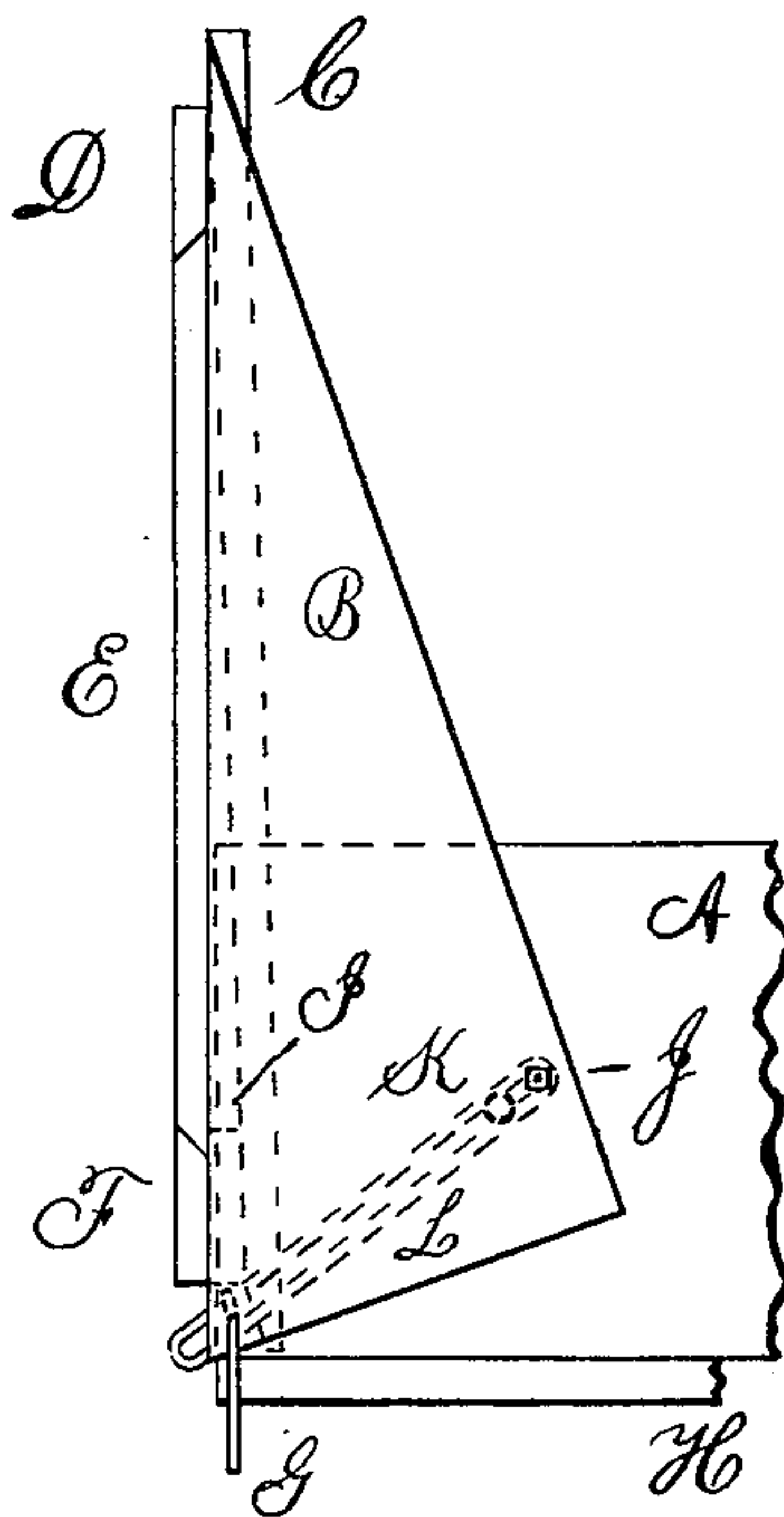


Fig. II.



Attest,

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UNITED STATES PATENT OFFICE.

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SHOVELING-BOARD FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 344,259, dated June 22, 1886.

Application filed October 30, 1885. Serial No. 181,354. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. DURYEA, a citizen of the United States, formerly of St. Louis, Missouri, but now residing at Peoria, in the county of Peoria and State of Illinois, have invented a certain new and useful Shoveling-Board, of which the following is a specification.

My invention relates to that class of end-gates for farm-wagons which are so made as to be let back and down until nearly or quite horizontal, in which position they are supported, thus forming a sort of rear extension to the floor of the wagon-box, upon which the operator may stand and advantageously use a scoop-shovel in unloading corn, coal, potatoes, or other products usually handled in this manner.

The objects of my improvements are, first, to reduce the cost of making; second, to facilitate the application to, use while on, and removal from the wagon; third, to provide guides or supports for the sides of the wagon-box and such top boxes as may be placed on or above the ordinary sides; fourth, to enable the board to be placed on any wagon without regard to height, and without seriously marring the box or interfering with the use of the usual form of end-gate when board is not desired. I attain these objects by the mechanism shown in the accompanying drawings, in which—

Figure I is a side view of board when down ready for use. Fig. II is a side view of board when up and fastened. Fig. III is a sectional view on the line M N, Fig. II.

Similar letters refer to similar parts throughout the several views.

The body of the board is formed by the triangular side pieces, B and B', the cross-pieces D and F, the stops E and E', the filler I, and the floor C. The fastenings are composed of the bolts J and J', or equivalents, fixed solidly in the side pieces, B and B', the bolts K and K' or equivalents, fixed likewise in the sides of the wagon-box A and A', the links L and L', and the catches G and G'. The lower or forward end of the floor C rests at all times directly on the floor H of the wagon-box, and moves thereon very much as if hinged.

An operator standing on the board, as shown in Fig. I, would cause a tendency to move J farther from K, which tendency is overcome by the tensile strength of the link L. A further tendency would be for the floor C to slide over and upon the floor H, which is prevented by the filler I and cross-piece F bearing against the ends of the floor H. If, accidentally, the board should be raised upward from the floor H, the cross-piece F would bear against the ends of the wagon sides, A and A', and produce the same result.

Since the floor C is narrower than the space between the wagon sides A and A', while the side pieces, B and B', are respectively outside the wagon sides, it follows that there must be a space between the floor C and the side piece, B. This space is practically closed by the stop E, which is placed, preferably, in the same plane as the cross-pieces D and F. Such placing provides a recess into which the wagon sides, top box, and additional side-boards will fit and be held by the board when it is up, as shown in Fig. II. The stop E, by bearing against the end of the wagon side, A, also assists in maintaining the board in an upright position, as shown in Fig. II. The mode of attaching said stop is immaterial, provided always that a recess is formed between the floor C and the side piece, B. The mode here shown is to bevel the ends of the stop and place them in seats provided in the cross-pieces D and F. The stop E' is in all respects similar to the stop E.

The filler I serves to give the floor C a firmer rest upon the floor H. (See Fig. II.) It also increases the depth of the before-mentioned recess. The filler I need not be a separate piece, but may be formed out of the same piece with the cross-piece F.

The link L is preferably made of one piece of iron or steel, and has a slot extending nearly or quite its whole length, large enough to slide easily upon the bolt K. In order that it may not slide equally upon the bolt J, it is provided with an eye or equivalent, through which it is pivoted upon J. If an eye is provided, the link may be straight, as shown at L' in Fig. III. It is preferable, however, to make the slot to extend the whole length of

the link and prevent said sliding upon J by means of a short bend near J, as shown in Fig. III.

When the operator no longer desires the board down, as in Fig. I, he places his hand on or near D and pushes up and forward. This causes the link to slide forward, downward, and finally swing backward upon the bolt K, at which point it and the board stand about as shown in Fig. II. The link is then fastened by means of the catch G, which is turned as shown at G' in Fig. III, till the link is hooked on or over it, when the catch is allowed to assume its usual position. This it will do, owing to its being pivoted and so proportioned that the weight of the longer arm controls its position. When thus fastened, the board is firmly fixed to the wagon. Other fastenings may be used; but this one is preferable.

The board can be almost instantly detached from the wagon by lowering it till the bolt K is midway between the ends of the link, and then springing the link off over the head of the bolt. The bolts K and K' are thus left on

the wagon; but they do not seriously mar nor in any way interfere with its use. The bolts K and K' can be removed or provided with T-shaped heads; but it is preferable to spring the link over them.

Having described my invention, what I claim is—

1. The combination, with a wagon-box having a pivot fixed in each side, of a shoveling-board having pivoted to each side piece a slotted link and a catch-lever, substantially as described, and for the purposes specified.

2. In combination with a wagon-box having a pivot fixed in each side, and a shoveling-board having a slotted link pivoted to each side piece, a catch-lever pivoted to each side piece of the board and so formed that an operator grasping one end of the lever may cause the other end to engage and retain the slotted link in the position necessary to lock the board upright on the wagon.

CHARLES E. DURYEA.

Witnesses:

W. T. IRWIN,

ELMORE L. SCHUEBLY.