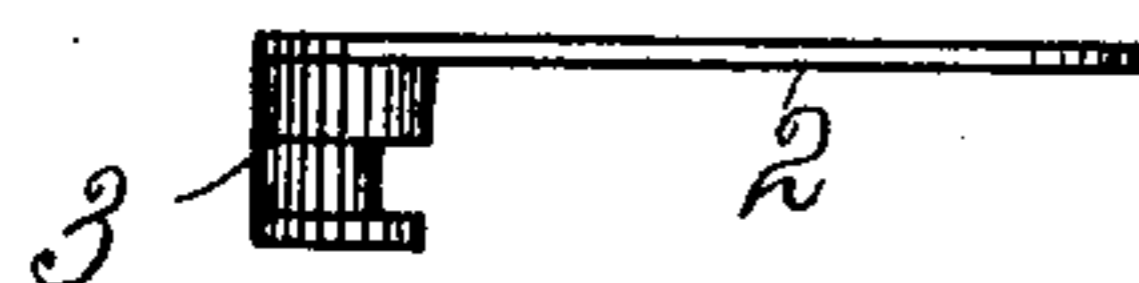
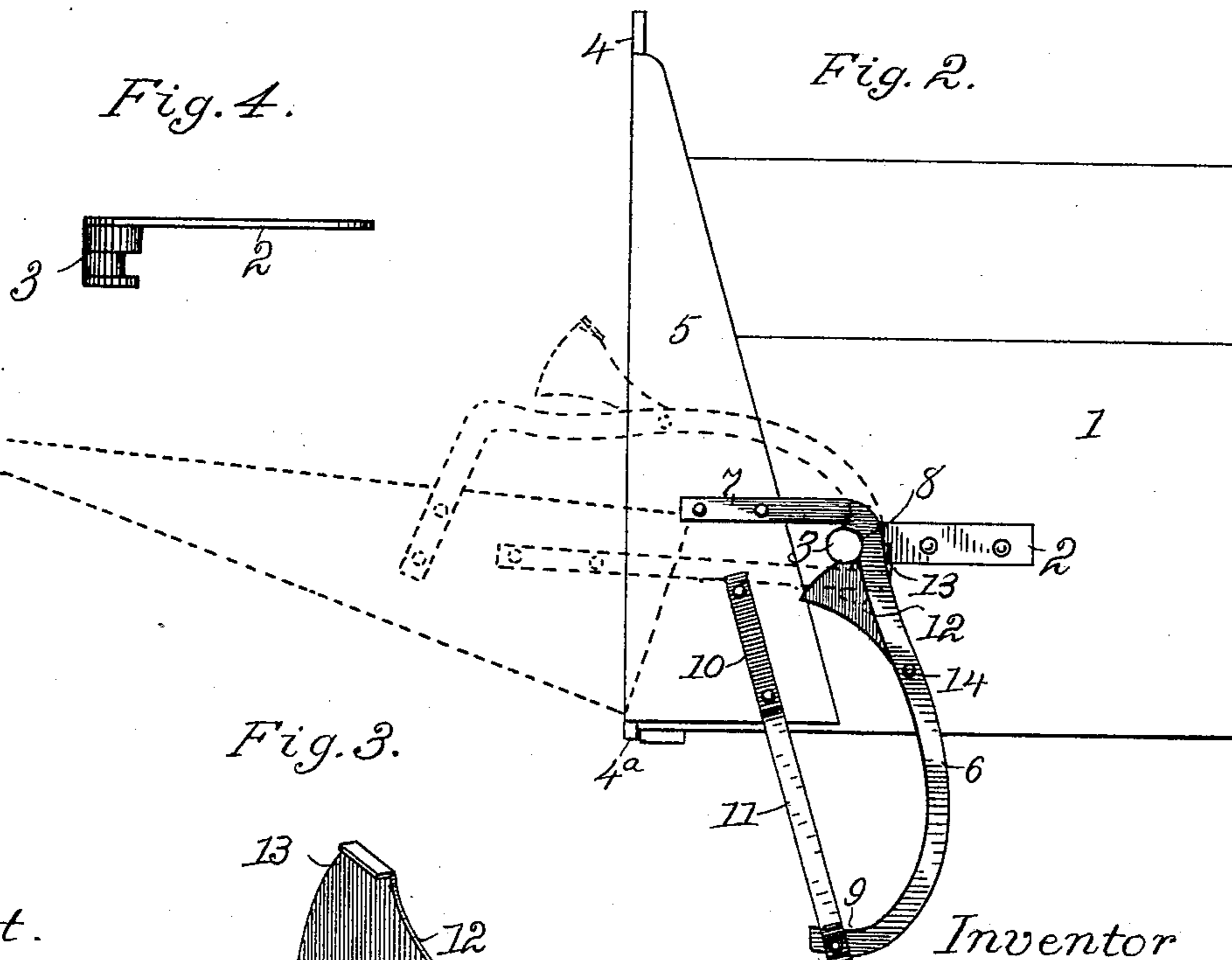
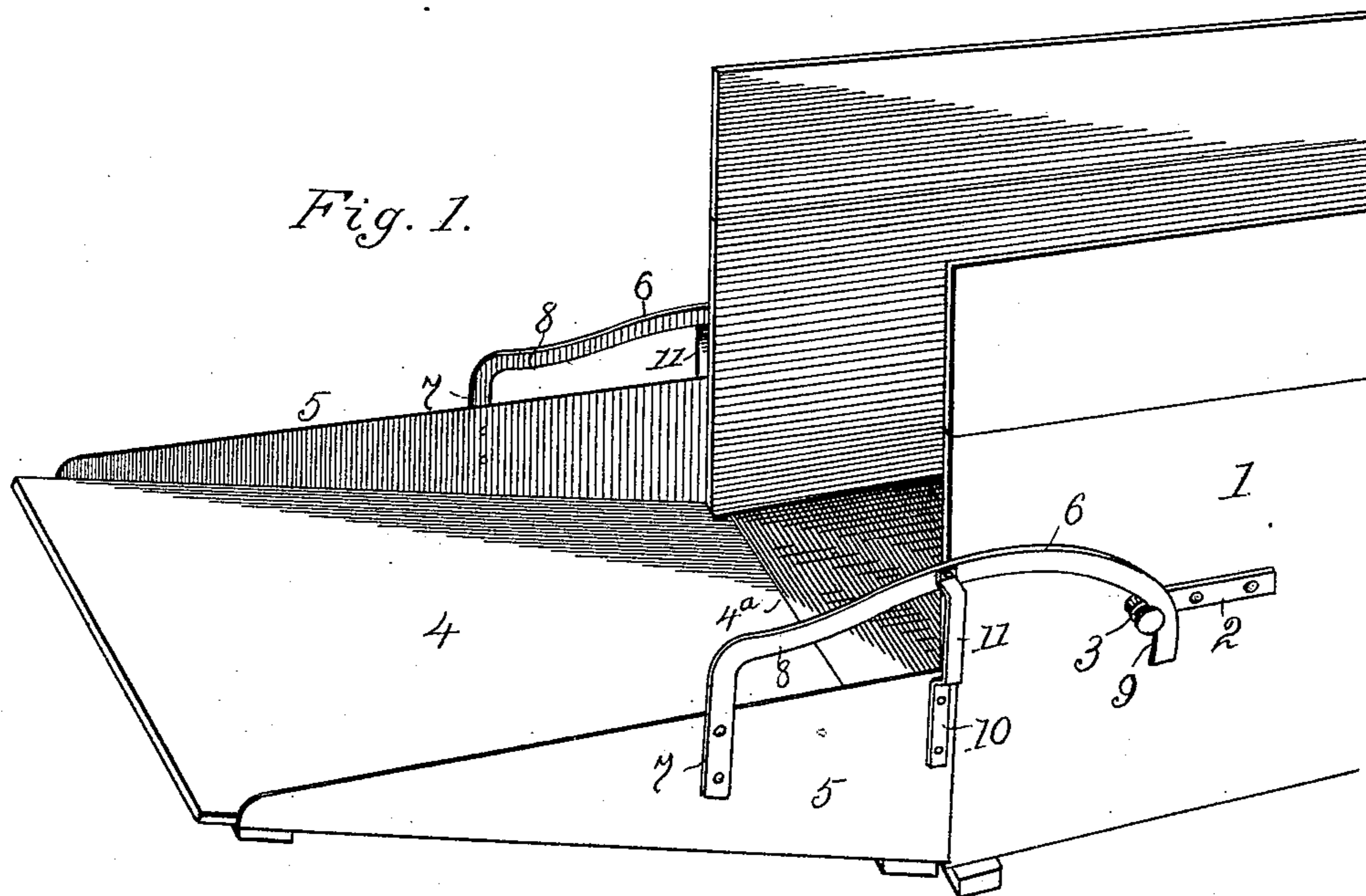


(No Model)

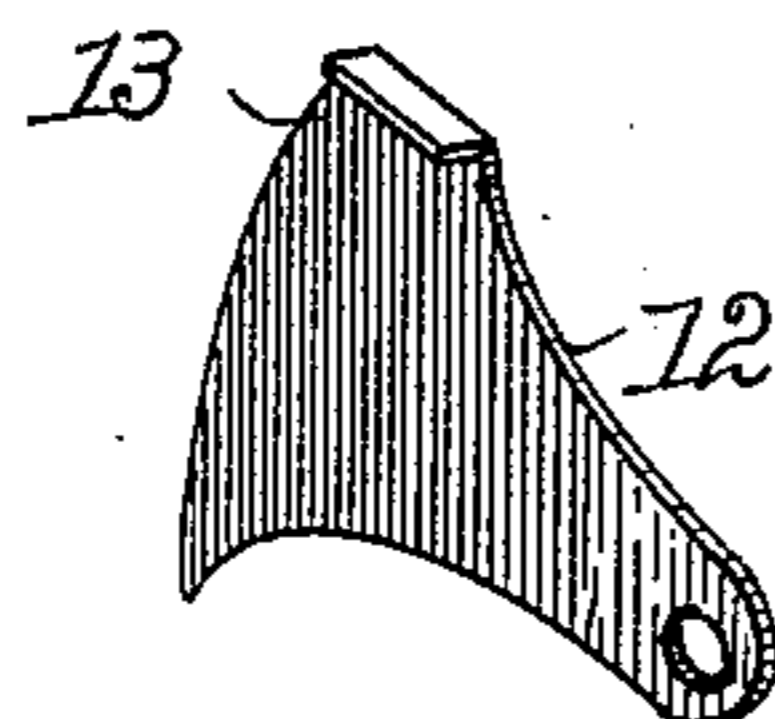
J. GROSS.  
SCOOP BOARD FOR WAGON BEDS.

No. 583,051.

Patented May 25, 1897.



*Fig. 3.*



Attest.  
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# UNITED STATES PATENT OFFICE.

JOHN GROSS, OF DECATUR, ILLINOIS, ASSIGNOR TO FELIX B. TAIT, OF  
SAME PLACE.

## SCOOP-BOARD FOR WAGON-BEDS.

SPECIFICATION forming part of Letters Patent No. 583,051, dated May 25, 1897.

Application filed December 28, 1896. Serial No. 617,190. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN GROSS, of Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Scoop-Boards for Wagon-Beds, of which the following is a specification.

This invention is intended to be attached to the bed of a wagon that is used for hauling grain and the like which is to be unloaded by shoveling. It is exemplified in the structures hereinafter described, and it is defined in the appended claims. The mechanical requirements of this class of articles are that the scoop-board shall be capable of ready attachment to and detachment from the wagon-bed, that it shall firmly close the end of the bed when used as an end-gate, and that its upper end may be swung downward and backward and be held in that position to form a surface on which shoveling may begin. Something has been done in a general way toward disclosing mechanical arrangements capable of performing some or all of the required functions of these devices. In a generic sense the development appears to be outlined and circumscribed, and it seems that future advancement will be largely in the line of perfecting details of construction with a view to getting best possible results with least possible expenditure of effort. At least that is the direction in which this invention tends.

In the drawings forming part of this specification, Figure 1 is a perspective representation of an embodiment of the broad idea of my invention. Fig. 2 is a side elevation of an embodiment of my invention in all its details, showing a modification in one of the mechanical elements and representing the board in each of its two extremes of position. Fig. 3 is a perspective representation of a latch that is employed when extra assurance is wanted that the board shall press firmly against the end of the bed when closed. Fig. 4 is an edge view of one of the straps that are fastened to the bed and that have pins with which the scoop-board connects.

In constructing a scoop-board in accordance with my invention a board, as 4, is made, in any desirable way, of the required size, is provided with side wings 5, which are preferably made of sheet metal, and it has notches at its lower

corners that permit a nosing 4<sup>a</sup> of the board to rest on the rear end of the bottom of the bed when the board is lowered to the position it occupies when used as a scoop-board. Metal straps 6 are made of the general conformation shown in the drawings, the essential characteristics being the attaching extensions 7, the bearing-surfaces 8, and the hooks 9. Each strap has a brace 10, that is laterally deflected, as shown at 11, to provide passage for the studs with which the straps engage, and such braces may be connected with the straps at any convenient point, as is suggested in the different representations of this feature in the drawings. The extensions 7 of the straps are fastened to the wings of the board, as are also the braces 10. The bearing-surfaces 8 are in approximately vertical lines when the scoop-board is upright, a slight inclination upward and backward being given, and they are separated some distance from the front edges of the wings. The hooks 9 extend a considerable distance beyond the lower terminations of the wings, and their ends lie approximately parallel with the bottom of the bed when the board is in an upright position. A strap 2 is fastened one to each side of the bed 1, and such straps are provided each with a laterally-projecting stud 3, that is made somewhat like the illustration given in Fig. 4.

The scoop-board is connected with the bed by the simple operation of catching the hooks 9 over studs 3, a proceeding that inspection of Fig. 1 will make readily obvious, and as the board is raised to a vertical position the straps move along the studs more or less closely until bearing-surfaces 8 encounter the studs, when further motion has the tendency to draw the board firmly against the end of the bed. The wings are so made that when the board is closed against the end of the bed the lower ends of the wings do not touch the bottom cross-piece of the bed and the board is supported entirely by the studs. This causes the weight of the board to exert a pull that is directed by the inclined bearing-surfaces against the end of the bed, and the result is that such pull, augmented occasionally by jars incident to travel, tends constantly to increase the pressure of the board against the bed. In all ordinary cases this is sufficient

provision for preventing dribbling of the contents of the wagon, but to provide for special emergencies a latch 12 is pivotally connected at 14, and when the board is closed its upper end is swung under the stud 3. The latch consists of a thin metal plate, which has a lateral lip 13, that engages the edge of the strap when the latch is locked, as shown in Fig. 2.

To prepare the board for scooping, it is raised high enough to carry the bearing-surfaces 8 clear of the studs, which action brings the nosing 4<sup>a</sup> above the bottom of the bed, and it is then swung backward to the position shown in Fig. 1, where it is sustained by the nosing resting on the bed and the hooks engaging the studs.

The board is disconnected from the bed by simply lifting it high enough, when it is in the position shown in Fig. 1, to raise the hooks clear of the studs.

In the construction of the device the wings are made only wide enough to answer scooping requirements, thus economizing material, and the straps, which are simple in construction and consequently cheap, are fastened to the wings in a simple and rapid manner. When the device is completed, it is strong and durable, as well as cheap, and it entirely meets all the mechanical requirements of articles of its class.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a scoop-board, the combination with a wagon-bed having laterally-projecting studs near its rear end and some distance above its bottom, of a board having side wings, cam-straps fastened to the wings above the lower edge of the board, extended downward in lines disincident with arcs drawn from the lower edge of the board, and hooks formed on the lower ends of the straps and separate from the wings, whereby the straps may be used to lock the board closed, the hooks may be used to hold it open, and it may be lifted bodily from contact with the studs.

2. In a scoop-board, the combination with a wagon-bed having laterally-projecting studs near its rear end and some distance above its bottom, of a board having a nosing adapted to rest on the bottom of the bed when the board is inclined and to hang clear of the bed when the board is raised, side wings for the board, and cam-straps fastened to the wings above the lower edge of the board, extended downward in lines disincident with arcs drawn from the lower edge of the board, and terminating in hooks below the lower ends of the wings and separate therefrom, substantially as set forth.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

JOHN GROSS.

Attest:

GEO. F. BELL,  
KARL A. MERRIS.