No. 764.721.

PATENTED JULY 12, 1904.

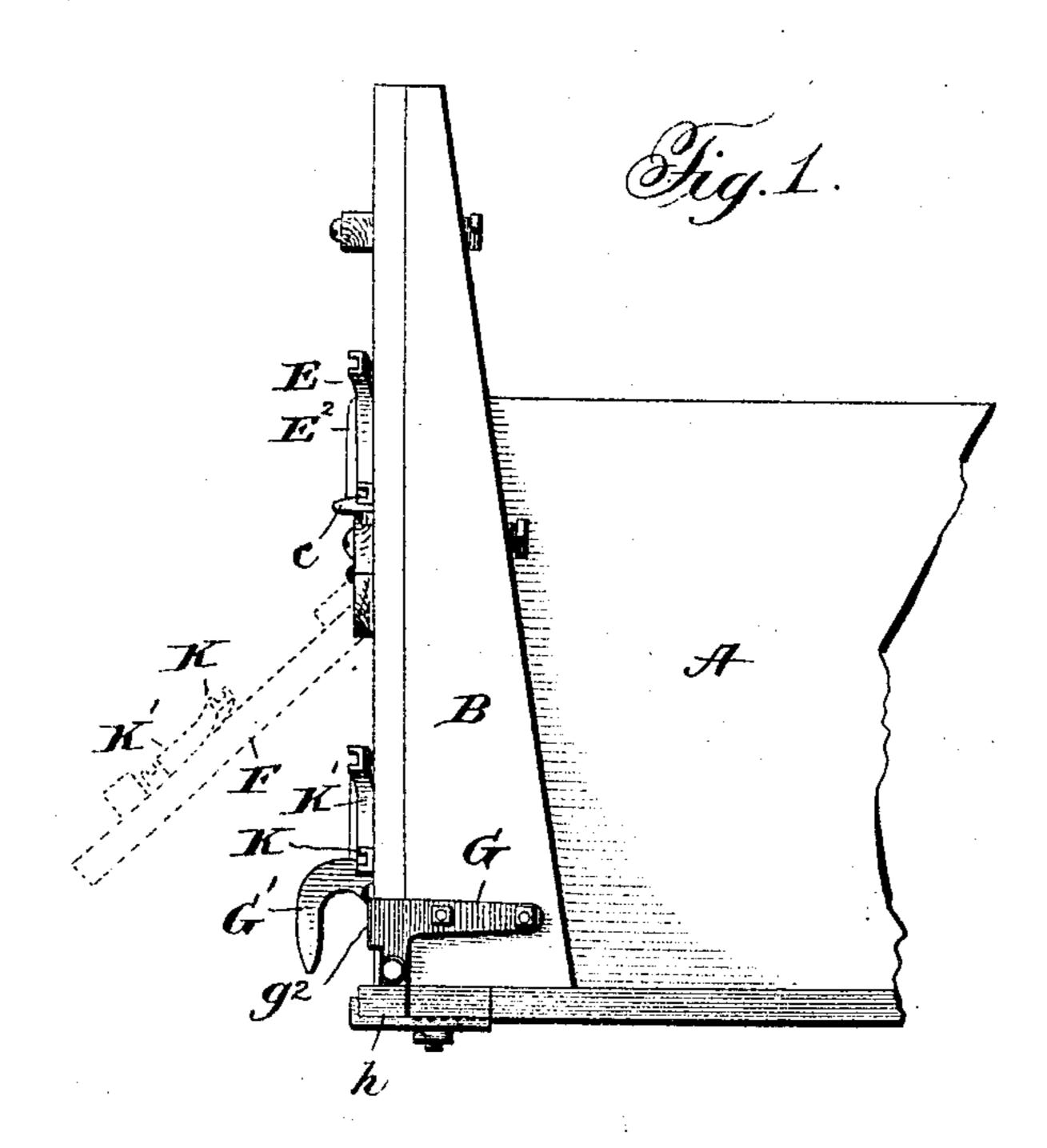
L. L. HAWORTH.

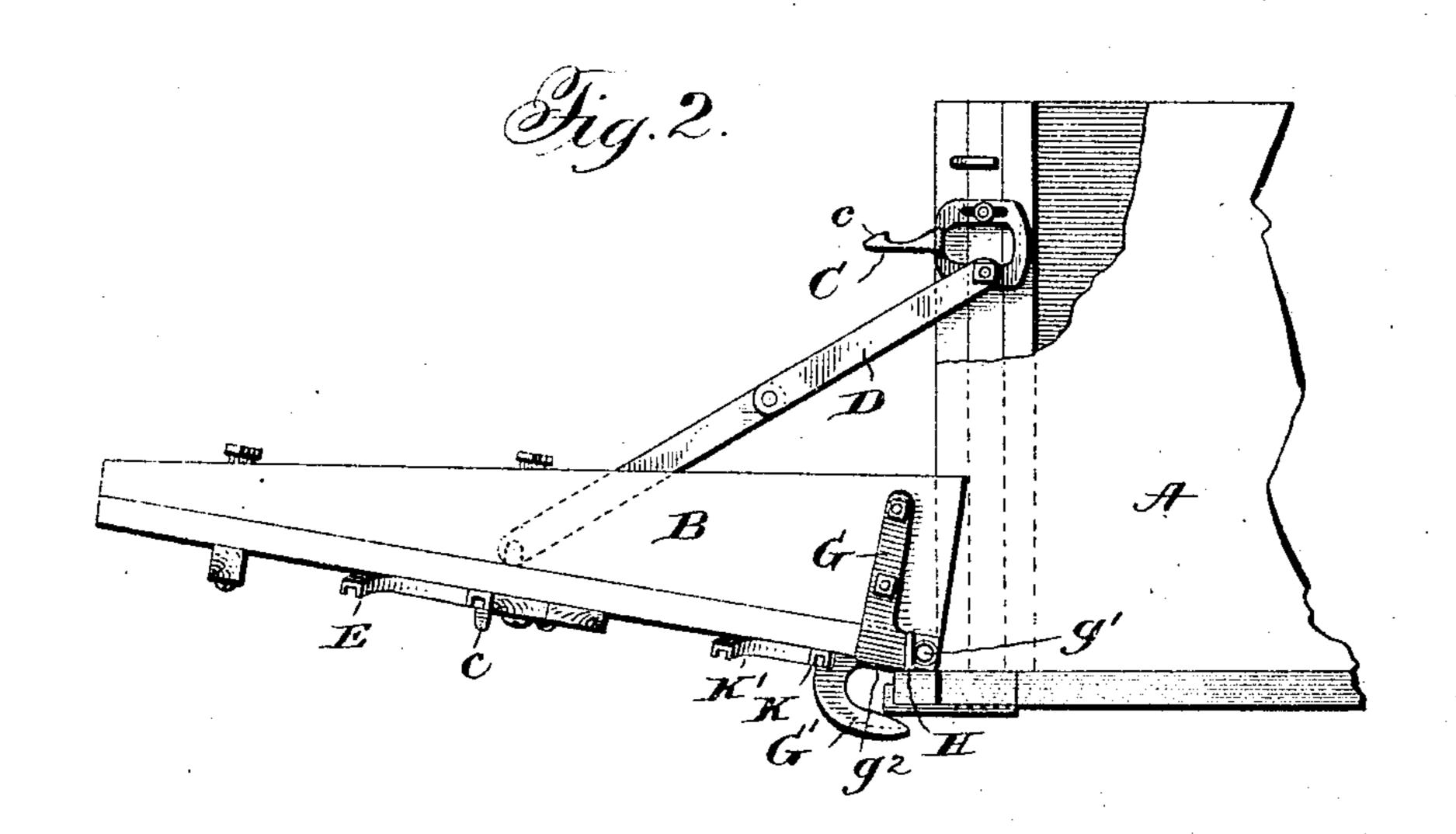
SCOOP BOARD.

APPLICATION FILED OCT. 26, 1903.

NO MODEL.

2 SHEETS-SHEET 1.





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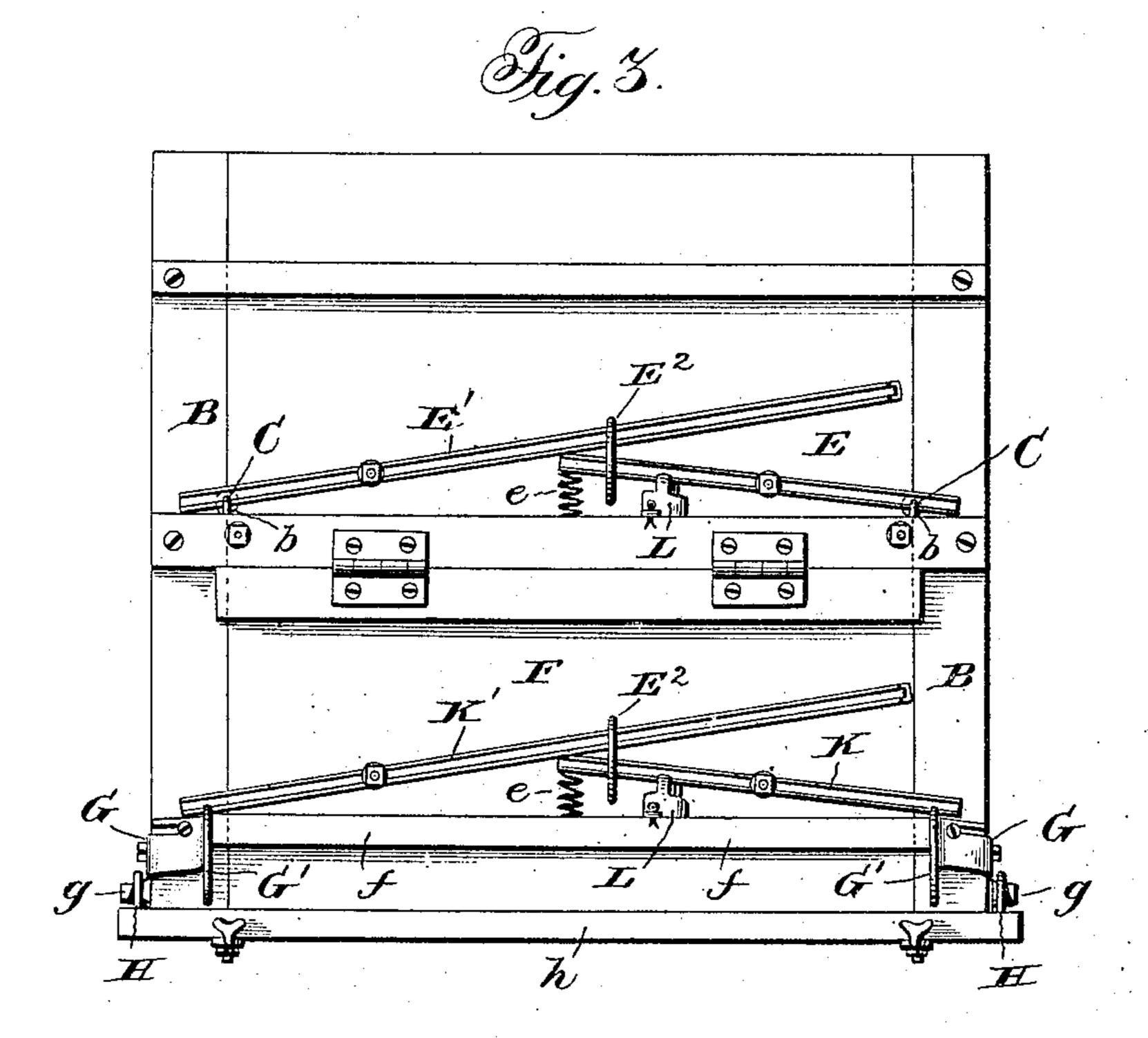
By Pacconmilant Attorneys.

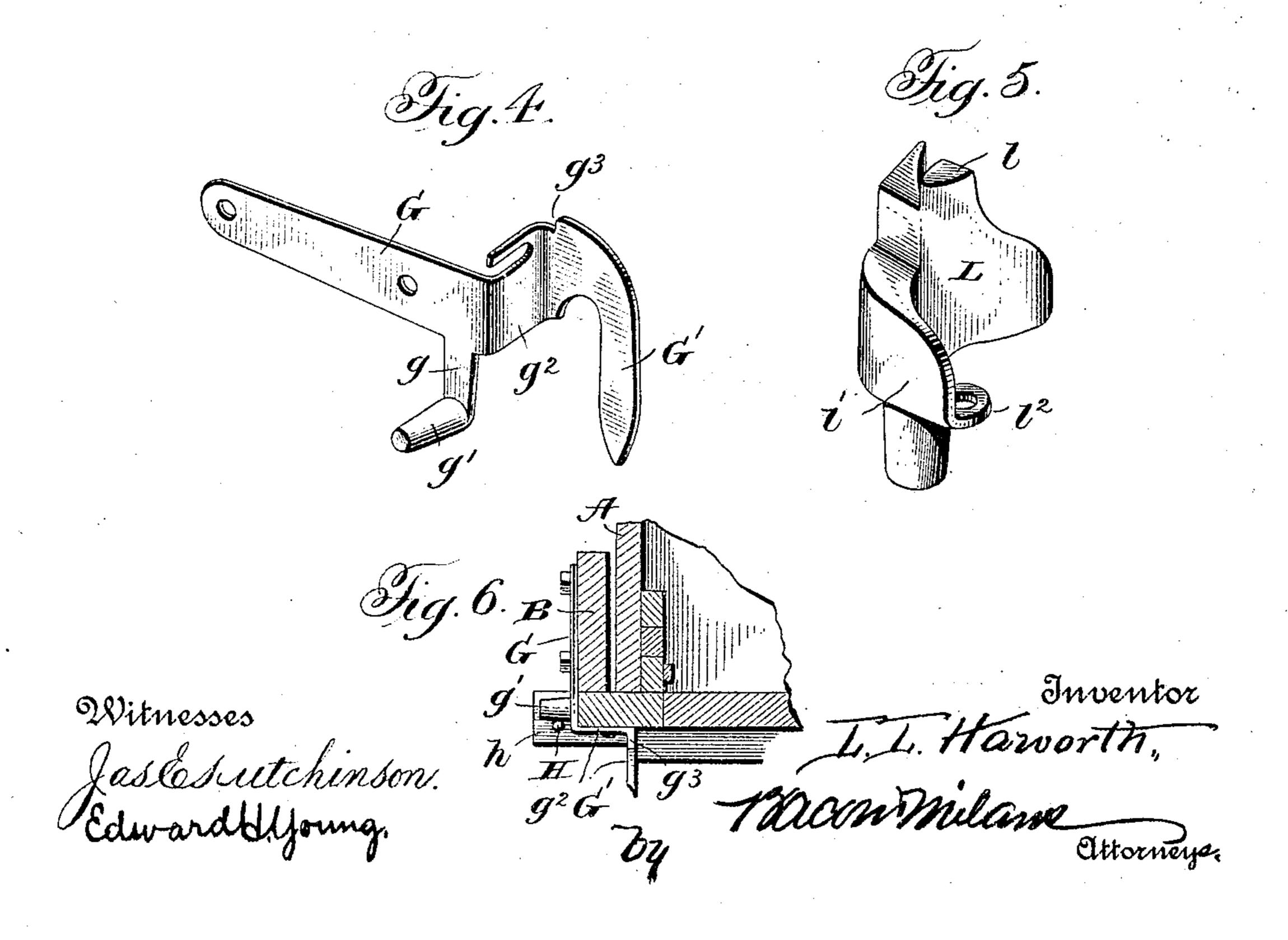
L. L. HAWORTH. SCOOP BOARD.

APPLICATION FILED OCT. 26, 1903.

NO MODEL.

2 SHEETS-SHEET 2.





United States Patent Office.

LYSANDER L. HAWORTH, OF DECATUR, ILLINOIS.

SCOOP-BOARD.

SPECIFICATION forming part of Letters Patent No. 764,721, dated July 12, 1904.

Application filed October 26, 1903. Serial No. 178,583. (No model.)

To all whom it may concern:

Be it known that I, Lysander L. Haworth, a citizen of the United States, residing at Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Scoop-Boards, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to an improvement in scoop-boards for wagon bodies or beds; and it is embodied in the construction and arrangement of parts presently to be described, and

defined in the claims.

The invention relates more particularly to 15 improvements in that type of scoop-board shown in my former Letters Patent, No. 681,480, dated August 27, 1901, the objects of the invention being to provide improved means for locking and releasing the board; to 20 provide means for locking and releasing the board from its position for closing the end of the wagon, said means being operable from one side of the wagon; to provide an improved scoop-board with a hinged section constitut-25 ing a trap or door which is located at the lower part of the scoop-board and which trap or door is provided with suitable means for locking it closed and retaining it normally in such condition, but which can be readily released, 30 and finally to provide a scoop-board structure with suitable means for permitting its ready application to the end of a wagon-bed.

In the drawings I have shown an embodiment of the invention, but desire it understood that variations as to structure can be made without departing from the invention.

Figure 1 is a side elevation showing a part of the bed. Fig. 2 is a similar view showing the scoop-board lowered. Fig. 3 is a rear view.

4º Fig. 4 is a perspective view of the bracket member. Fig. 5 is an enlarged view in perspective of the lock or the latching-levers, and Fig. 6 is a detail section.

A designates the wagon bed or body, and B designates the scoop-board. On the upright sides of the body are secured the hooks C, one on each side. These hooks are of a construction shown in my aforesaid patent with this exception: They are provided on their outer ends with hooks c, which take through aper-

tures b in the board B, their hooked ends protruding slightly beyond the board, as shown in Fig. 1. I prefer to have the hooks adjustable, as shown in my aforesaid patent, and to the lower member is secured links D, the 55 same being secured by a bolt which passes through the hook member and the bed. The links D, there being conveniently two, are united by pivot, the outer end of the outer one being secured to the board at or near its 60 center and in any convenient manner, so that as the board is elevated the links will be folded. Manifestly other bracing means may be employed.

To secure the scoop-board in its elevated or 65 closed position, I employ conveniently the following mechanism: Pivoted on the outer face of the board is a locking-lever E, its inner end terminating at or near the center and resting on the spring e, secured to the board 70 and to the lever. The opposite end of the lever engages the hook c as it protrudes beyond the face of the board. E' designates a complementary lever positioned, however, opposite to the lever E, and the end of the lever 75 E' is extended to at or near the opposite ends of the board, so that the short arm of the lever E' will engage over the adjacent hook c, while the long arm of the lever is positioned to rest on the upper end of the lever E above 80 the spring e. The outer end of the long arm of the lever extends adjacent to the side of the

By the above-described construction of locking member it will be seen that when it is nec-85 essary to lower the scoop-board the operator need only press down on the end of the long arm of the lever E', which necessarily elevates the short arm, and in that the long arm

rests against the inner arm of the lever E the 90 latter is pressed down against the tension of the spring, and thereby raising the outer end of the lever E. The one movement of the lever E' serves to unfasten the scoop-board, and it can be tilted down to the position shown in 95 Fig. 2. The spring immediately resets the levers, and as the catches or hooks are beveled the board when elevated will automatic-

ally lock, the ends of the levers riding over the inclines of the hooks and by the spring-

pressure are immediately forced behind the shoulders or hooked portions of the hooks. The above-described construction is convenient and effective. It may, however, be found 5 necessary to secure a guiding-clip, as E2, at the center of the board and below which the levers both project.

The bottom portion of the scoop-board is made with a hinged door or section F, the 10 hinges being secured at its upper edge, so that the door opens upward. The employment of such a construction is advantageous when the wagon is to be used as a dumping-wagon. In fashioning the hinged section or door F. I 15 conveniently make it of a length coinciding with the width of the interior of the box or wagon-bed, as shown in Fig. 6, so that in closing the door F it will not meet with any accumulations of grain or obstructions at its 20 sides, as would be the case were the door F fashioned to overlap the ends of the bed. To prevent the door from swinging inward, it is extending slightly below the bottom of the bed and is also provided with a cleat f, the 25 ends of which project beyond the edge of the door and rest against the sides of the scoopboard.

Scoop-boards of the above-described construction are conveniently adapted for appli-3° cation to the usual wagon bodies or beds, and therefore as to their rigidity must depend on their individual construction. With this in view I have provided the board with suitable attaching means consisting conveniently of 35 metal brackets, such as shown in Fig. 4 of the drawings. These brackets are formed of metal and have elongated plate portions G, which extend across the meeting edges of the bottom and sides of the scoop-board and are 40 there bolted or secured, and from the outer ends of the plates G are depended arms g_{\bullet} which carry on their lower ends horizontal studs g', which rest behind suitable pins H, secured in the bottom cross-beam h of the 45 wagon-bed, as shown in Figs. 1 and 2. The studs rest normally against the cross-beam and against the pin, so that a bearing is formed on which the scoop-board is pivotally supported and prevented a movement inward, 50 outward, or downward. To prevent the upward movement of the scoop-board when the same is lowered to the position shown in Fig. 2. I have found it convenient to extend the plate G, bending the same at right angles, as 55 at g^2 , which angular portion is fitted and by suitable means secured to the rear face of the edge portion of the scoop-board. The end of the angular portion of the plate G is bent outwardly, tapered, and thence carried down-60 ward to form hook members G', which hook members are so positioned relative to the lugs g' that when the scoop-board is lowered the hooks will be projected beneath the crossbeam h, and thereby prevent the inner or lower

ends of the scoop-board from being moved 65 upward.

To provide a convenient means for securing the door F in its closed position, I employ the same arrangement of levers for locking purposes as above described; but in lieu of the 7° catch-hooks I form in the upper portions of the inclined or hook portion of the brackets a catching-notch, such as g^3 , into which the outer ends of the respective levers K and K' project. The operation of the latter levers 75 are the same as those of levers E and E'. To lock the respective levers against accidental movement, I conveniently employ a pivoted block L, the same being pivoted, respectively, to the cleats below and having a shoulder l, 80 designed to move below the inner ends of the levers E and K and prevent their being lowered, the locking of the said levers against movement serving also to lock the companion levers. The block L has an arm l'extending 85 out therefrom, which is provided with an eye l^2 , which projects beyond the supporting-cleat and is designed to receive a pin or key which, projecting below the upper edge of the cleat, prevents the movement of the block on its 90 pivot. When, however, it is desired to unlock the levers, it is only necessary to remove the pin, and the block can be turned so as to throw the locking-shoulder l out from below the levers, and thereby permit the movement 95 of the levers. Other means for locking the levers may be employed.

From the foregoing it is thought that the general operation of the construction and the advantages thereof will be readily appreciated. 100

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The combination with a body or bed of a scoop-board pivotally associated therewith, 105 catching projections on the bed projecting beyond the scoop-board, and locking devices comprising spring-actuated levers arranged to engage each other and the said catching projections, one of said levers projecting above 110 and beyond the other, substantially as described.

2. The combination with a wagon-bed of a scoop-board pivotally associated therewith, and means for locking the scoop-board in an 115 elevated position comprising catches and spring-actuated levers, one of which has an extension arranged to engage the other for simultaneous actuation of the two, substantially as described.

3. In a scoop-board attachment for wagons a locking device comprising two levers pivotally supported and arranged one above the other, a spring acting on the lower lever, and an extension on the upper lever by which both 125 levers may be actuated.

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4. The combination with a wagon-body, of a scoop-board, means for locking the scoopboard in an elevated position, comprising two overlapping locking members, a spring for actuating the locking members in one direction, and operating means for actuating the levers in the opposite direction, and a lock for the levers.

- 5. The combination with a wagon-body of a movable scoop-board, means for locking the scoop-board comprising two overlapping spring-actuated levers, and a lock for the levers.
- 6. The combination of a scoop-board, a bracket secured thereto comprising an angle-plate overlapping the back and sides of the board, a pivot-lug secured to the plate, and an offset hook projecting beyond the back of the board.
 - 7. In a scoop-board for wagons, the combi-

nation with the board, of a plate overlapping the sides and having a portion at an angle 20 thereto, a pivotal projection thereon, and an outwardly-projecting hook portion on the angle extension of the plate extending beyond the board.

8. The combination with a scoop-board, of 25 a hook-shaped member secured thereto and positioned to take under the wagon-body, said hook having a catching-notch, and a movable member on the board adapted to engage said notch.

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

LYSANDER L. HAWORTH.

Witnesses:

J. M. Perkins, F. R. Goode.