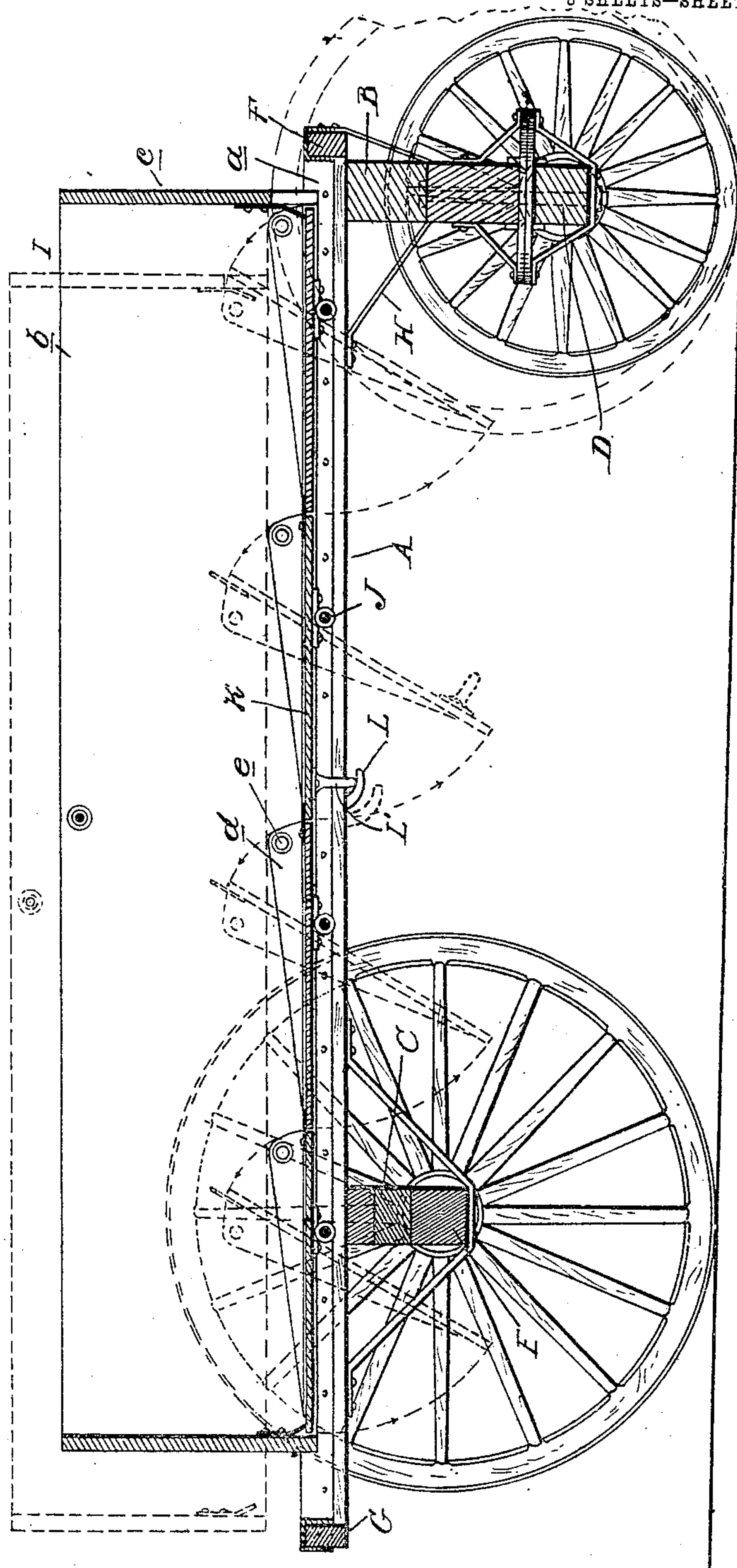


No. 801,302.

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W. E. CURRIE.
DUMPING WAGON.
APPLICATION FILED FEB. 18, 1905.

3 SHEETS—SHEET 1.



WITNESSES

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3 SHEETS—SHEET 2.

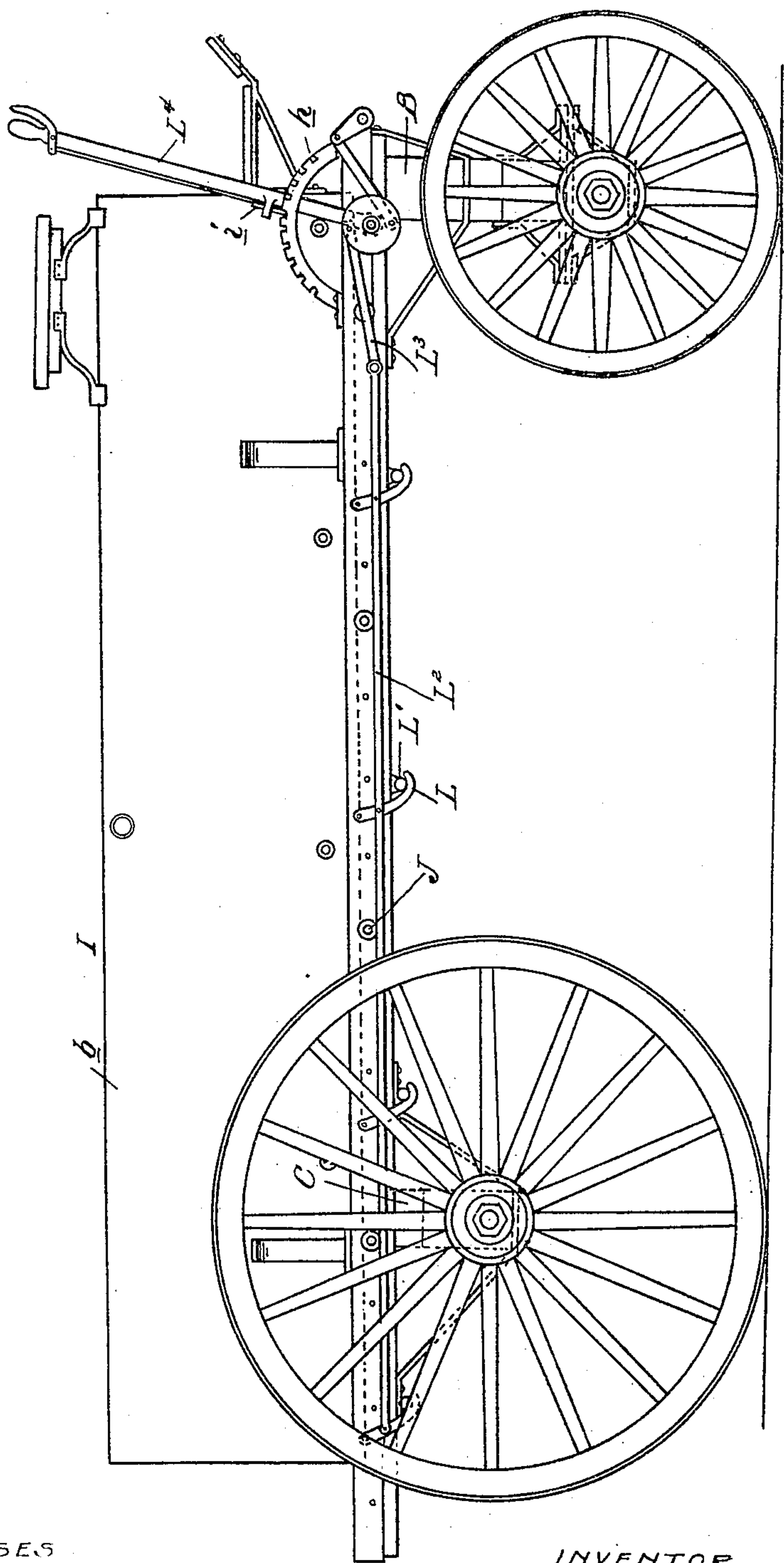


FIG. 2.

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3 SHEETS—SHEET 3.

FIG. 3.

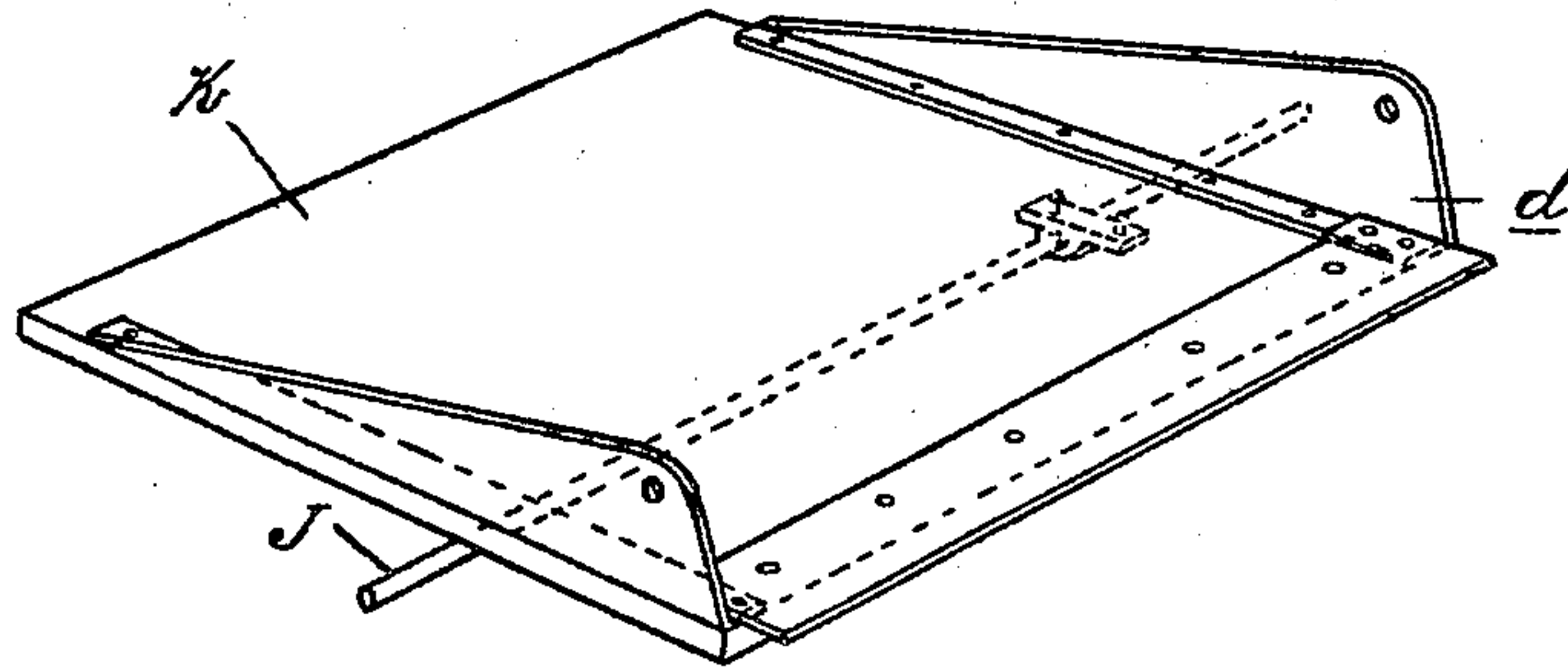


FIG. 4.

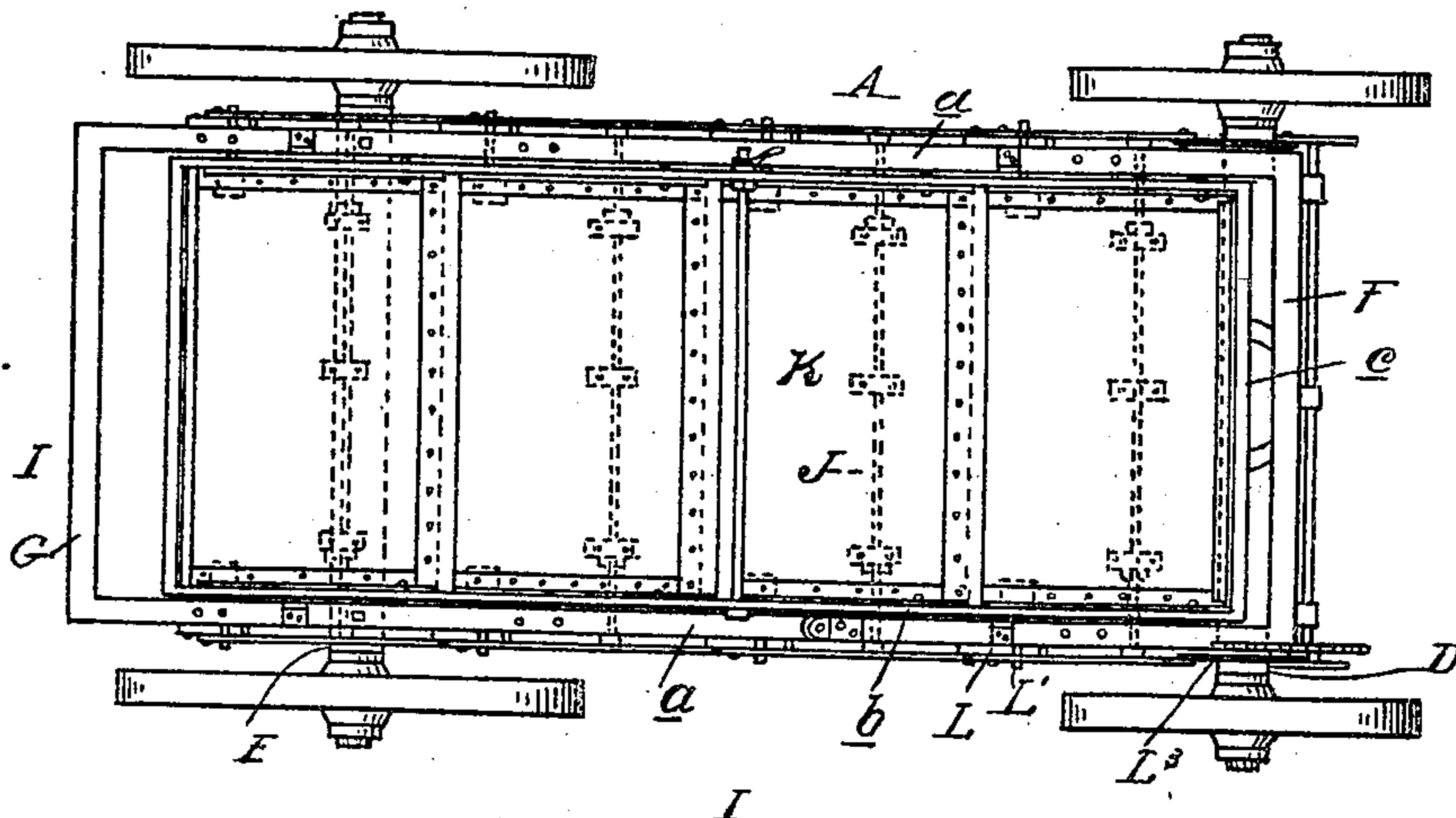
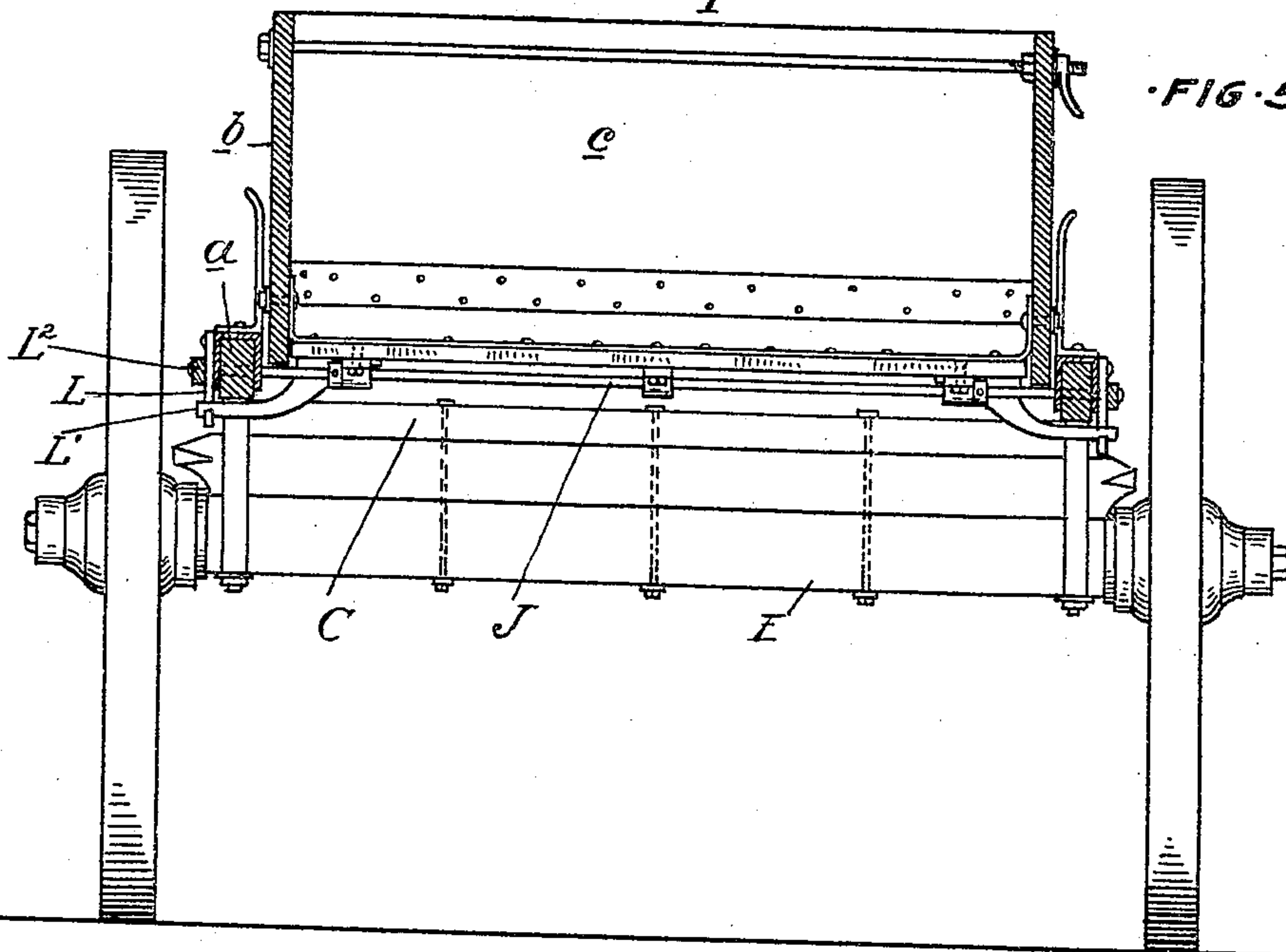


FIG. 5.



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DUMPING-WAGON.

No. 801,302.

Specification of Letters Patent.

Patented Oct. 10, 1905.

Application filed February 18, 1905. Serial No. 246,313.

To all whom it may concern:

Be it known that I, WILLIAM E. CURRIE, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Dumping-Wagons, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention relates to dumping-wagons; and it consists in the construction as herein-after set forth.

In the drawings, Figure 1 is a longitudinal section through the wagon. Fig. 2 is a side elevation thereof. Fig. 3 is a perspective view of one of the tilting sections of the bot-
15 tom. Fig. 4 is a plan view of the wagon, and Fig. 5 is a cross-section.

It is one of the objects of the invention to
20 obtain a construction by which the load in the wagon may be dumped by the driver without the necessity of his leaving his seat upon the wagon-box.

It is a further object to provide means for
25 automatically restoring the wagon to a condition for receiving another load.

A is a frame comprising the side sills *a*, which are rigidly secured to the bolsters B and C for the front and rear axles D and E.
30 This frame is preferably further braced by the front and rear cross-sills F and G and by the knee-braces H.

I is the wagon-box, which is formed by the side-boards *b* and end-boards *c*. This box is
35 not directly connected to the frame A, but is secured in position through the medium of tilting bottom-boards of the following construction: J represents shafts extending transversely of the frame A and secured to
40 the sides *a* thereof. These shafts form pivot-bearings for the sections K of the wagon-bottom, which are also pivotally attached at one edge to the sides *b* of the wagon-box I, as by means of the ears *d* and pivots *e*. Each of
45 the sections K is supported upon the shaft J intermediate the forward and rear edges of the section, but at one side of the center thereof. Thus when a load is placed in the wagon the weight will tend to lift the sec-
50 tions K and cause the automatic dumping. The sections K are, however, normally held from thus tilting by a suitable locking device, such as a series of dogs L, pivoted to the side sills of the frame and having a hooked en-
55 gagement with lugs or projecting pins L' on each section of the bottom. The dogs L are

all pivotally connected to a common actuating-bar L², which is connected by a link L³ with a lever L⁴, and the latter is locked in position, as by means of a notched segment *h* 60 and latch-dog *i*. This lever also controls a similar locking-bar upon the opposite side of the frame provided with similar locking-dogs, and the arrangement is such that when in the position indicated in Fig. 2 all of the sections 65 of the bottom are held from tilting. The unlocking of the sections is effected by a movement of the lever which withdraws the supports of the dogs L from the pins L'.

With the construction as described when a
70 load is placed in the wagon the weight upon the longer side of each of the sections K of the bottom will tend to tilt the same. This action is, however, restricted by the pivotal connection *e* between each of said sections 75 and the wagon-box, while the latter is held in fixed relation to the frame A by the locking mechanism above described. Thus as long as the dogs L remain in engagement with the lugs L' the bottom of the wagon will 80 be maintained in position. To dump the wagon, the operator shifts the lever L⁴ to release the lugs L' from the dogs L, whereupon the weight of the load will cause each of the sections to tilt, this movement simultane- 85 ously lifting the wagon-box, as indicated in dotted lines in Fig. 1. As soon as the load is discharged the weight of the box will cause it to again return to its normal position, and in so doing the sections K will be again closed. 90 The operator then relocks the sections by again shifting the lever L⁴.

It is to be observed that the sections K being connected to the rock-shaft J intermediate their length said sections in tilting 95 will have an upwardly-moving portion as well as a downwardly-moving portion. This limits the amount of downward movement necessary to discharge the load and provides greater space beneath the wagon for receiv- 100 ing the load than where the entire section swings downward. Furthermore, by providing a series of these tilting sections instead of a single tilting bottom a relatively long wagon-box may be employed and the 105 load successfully discharged therefrom.

While I have described a construction of dumping road-wagons, it is obvious that the same construction would be applicable to dumping-cars, and the latter I believe to be 110 also included within the spirit of my invention.

What I claim as my invention is—

1. In a wagon, the combination with a frame, of a wagon-box supported thereon and a bottom for said box formed of a plurality of tilting sections pivotally attached to said frame and to said box, whereby the tilting of said sections will raise the box.

2. In a wagon, the combination with a frame, of a wagon-box, a bottom therefor comprising a plurality of tilting sections pivotally secured to said frame, and a connection between said sections and the box, whereby the latter will be lifted bodily simultaneously at both ends during the tilting of said sections.

3. In a wagon, the combination with a frame, of a wagon-box and bottom therefor, comprising a plurality of tilting sections, each pivotally secured to said frame and pivotally connected to said box to raise the same bodily during the tilting movement, and means for locking said box from vertical movement.

4. In a wagon, the combination with the wheels and axles, of a reach-frame connecting said axles comprising separated side sills, a wagon-body between said sills, a bottom therefor comprising a plurality of tilting sections, each section being pivotally connected with said sills, intermediate its ends, and pivotally connected to said box at one end of the section, the portion of the section upon the opposite side of the pivot being of greater

length, whereby the weight of the load will tilt the section and lift the box.

5. In a wagon, the combination with the wheels and axles, of a reach-frame connecting said axles, comprising separated side sills, a wagon-box between said sills, a bottom therefor comprising a plurality of tilting sections, cross-shafts on which said tilting sections are mounted, engaging bearings in said side sills, wings projecting upward from said sections and pivotally connected to the sides of said wagon-box, and means for locking said wagon-box from vertical movement in relation to said frame.

6. In a wagon, the combination with a frame, of a wagon-box and bottom therefor comprising a plurality of tilting sections pivotally connected to said frame and to said wagon-box to lift the latter in tilting, a series of locking-dogs engaging lugs on said sections, a common actuating-bar for moving said dogs in or out of engagement with said lugs, and a lever under the control of the driver for actuating said bar, whereby the load may be dumped.

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

WILLIAM E. CURRIE.

Witnesses:

EDWARD D. AULT,
JAS. O. BARRY.