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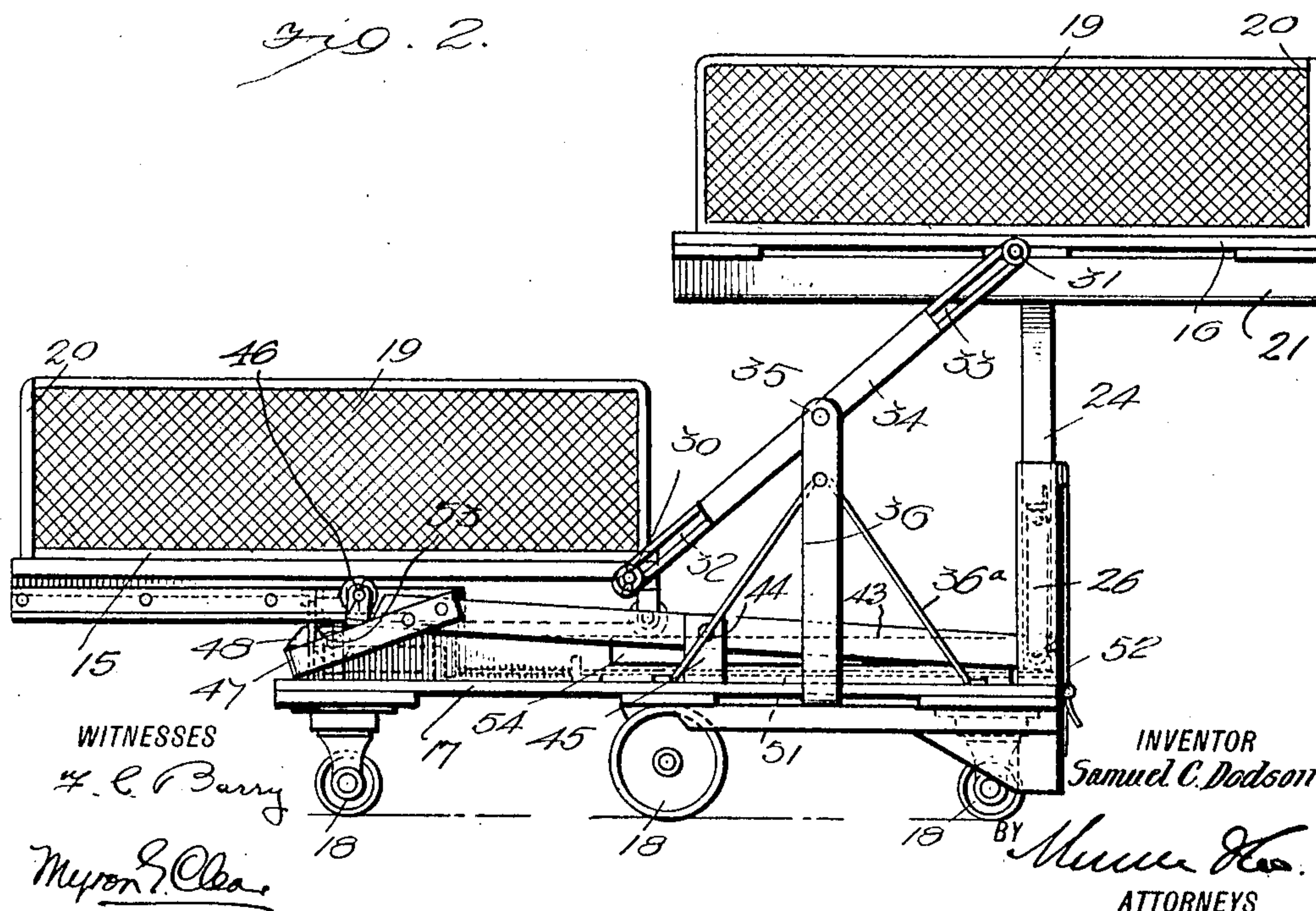
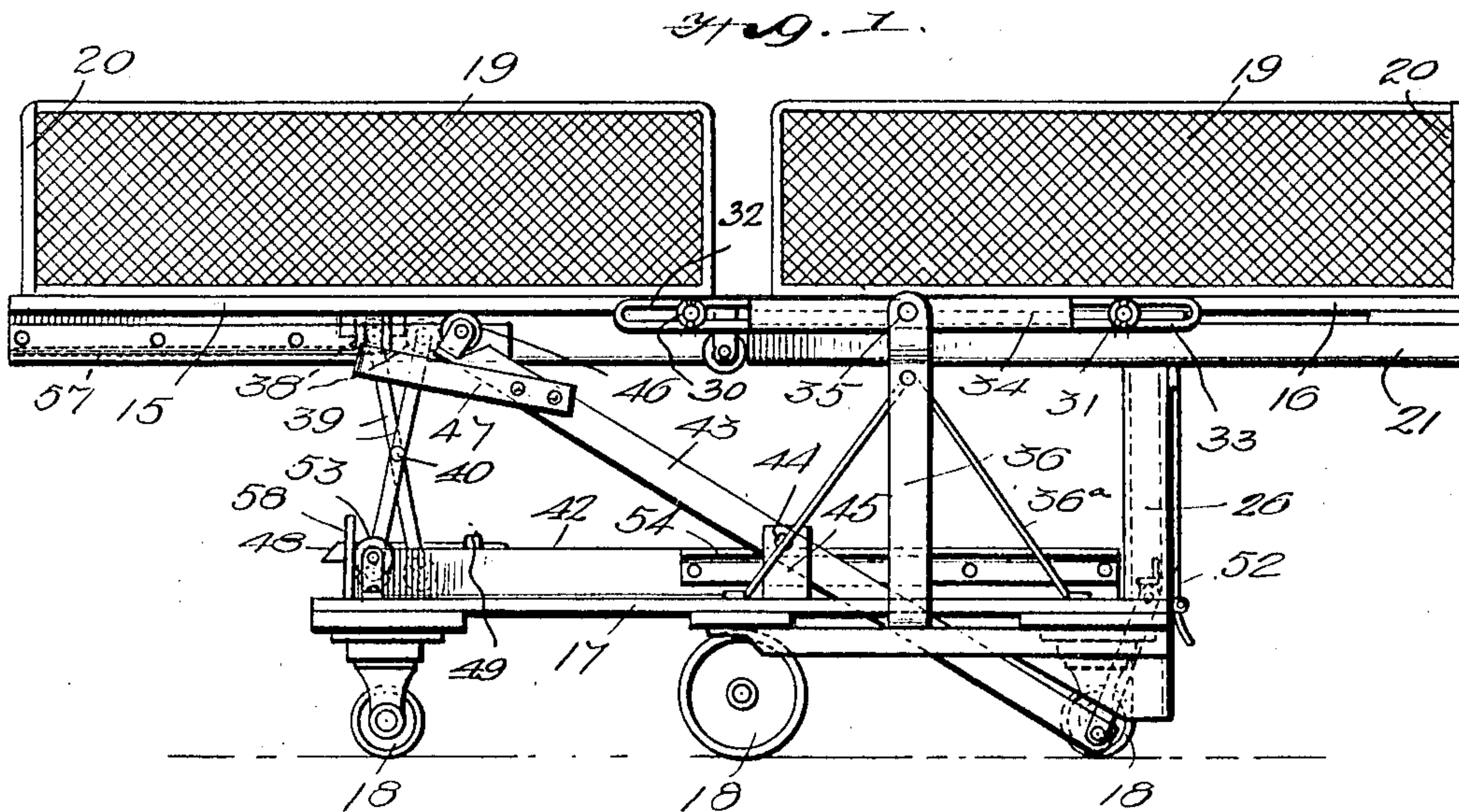
TABLE TRUCK.

APPLICATION FILED FEB. 28, 1918.

1,298,185.

Patented Mar. 25, 1919.

3 SHEETS—SHEET 1.



WITNESSES

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3 SHEETS—SHEET 2.

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Fig. 3.

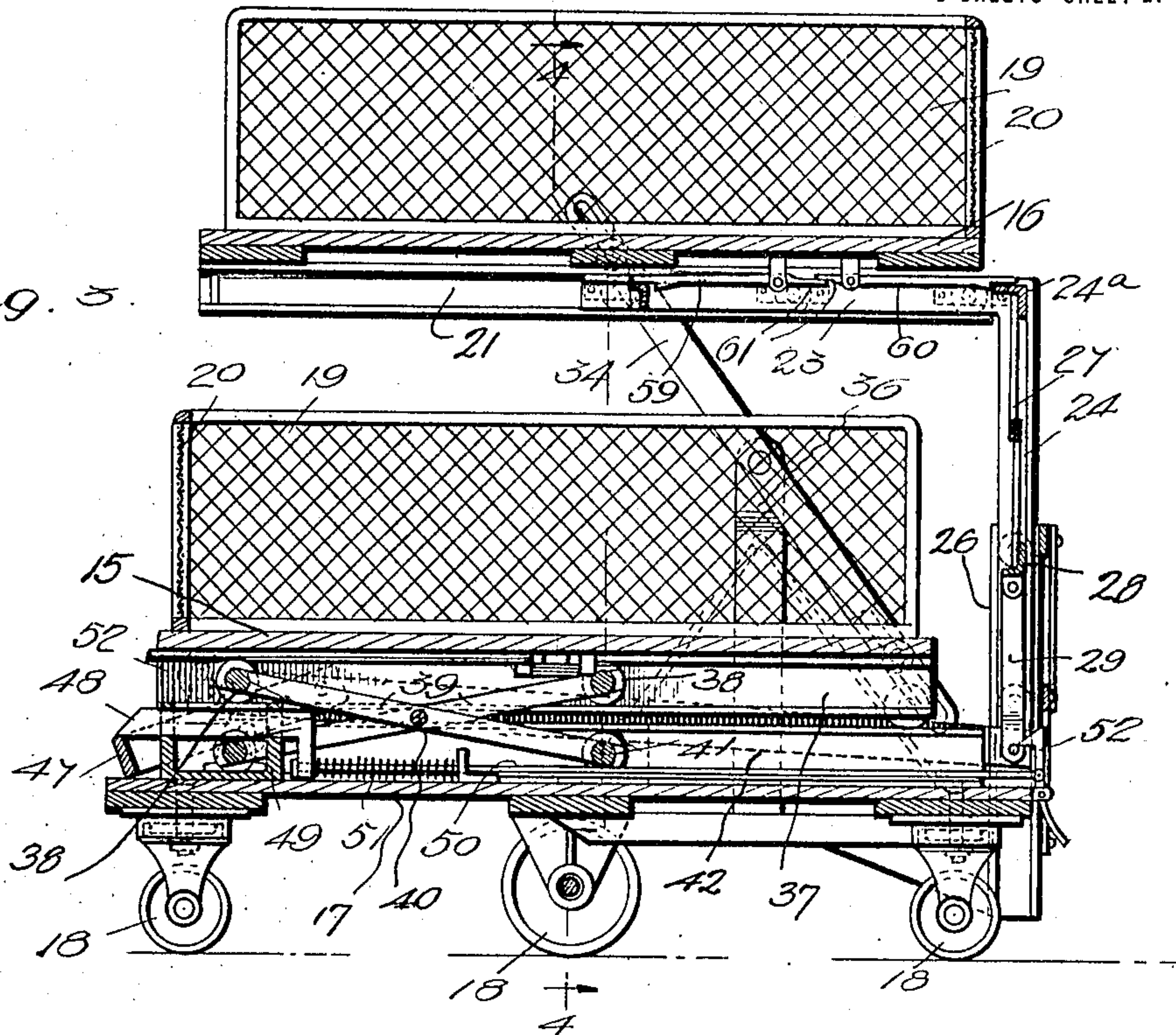
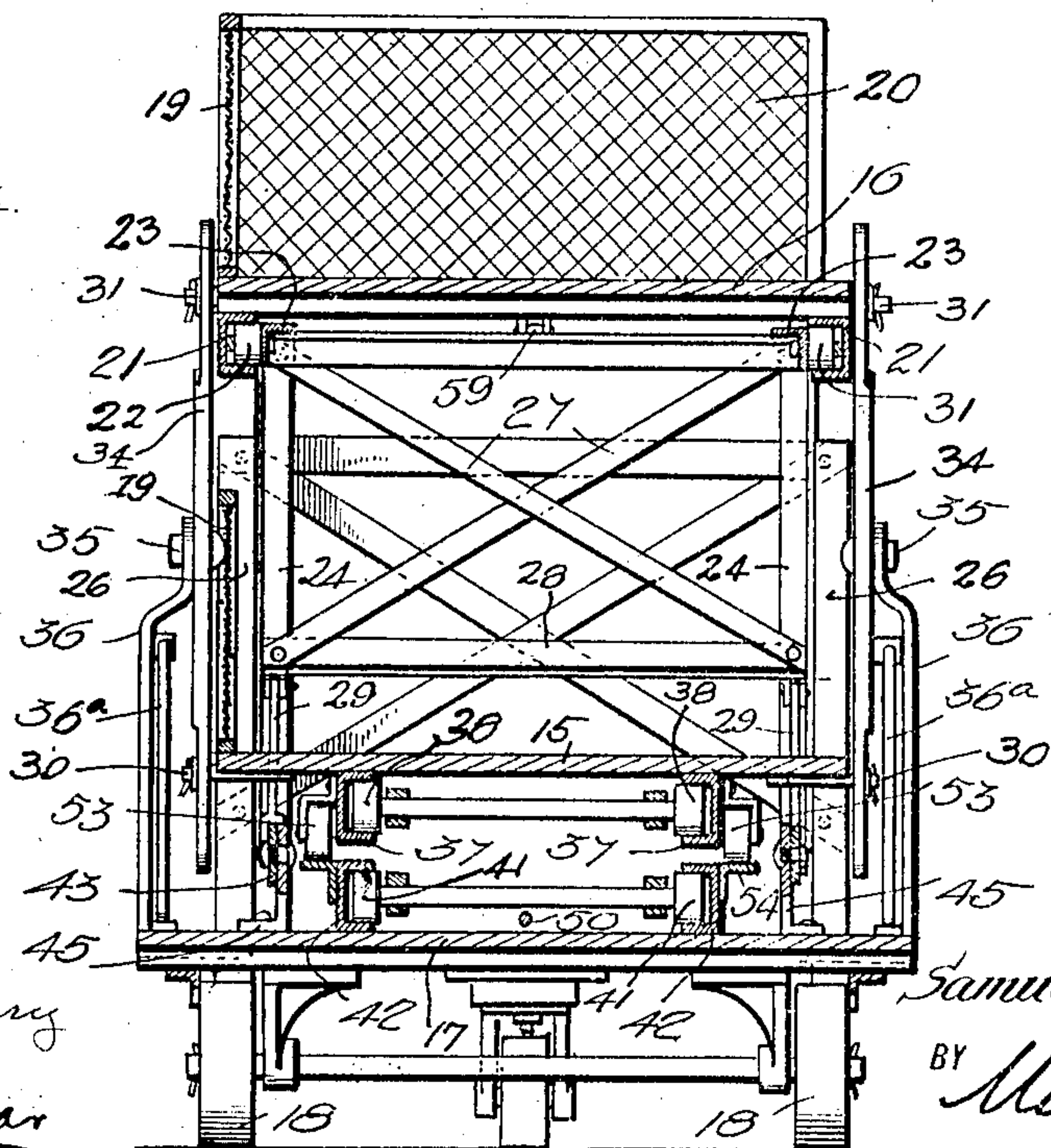


Fig. 4.



WITNESSES

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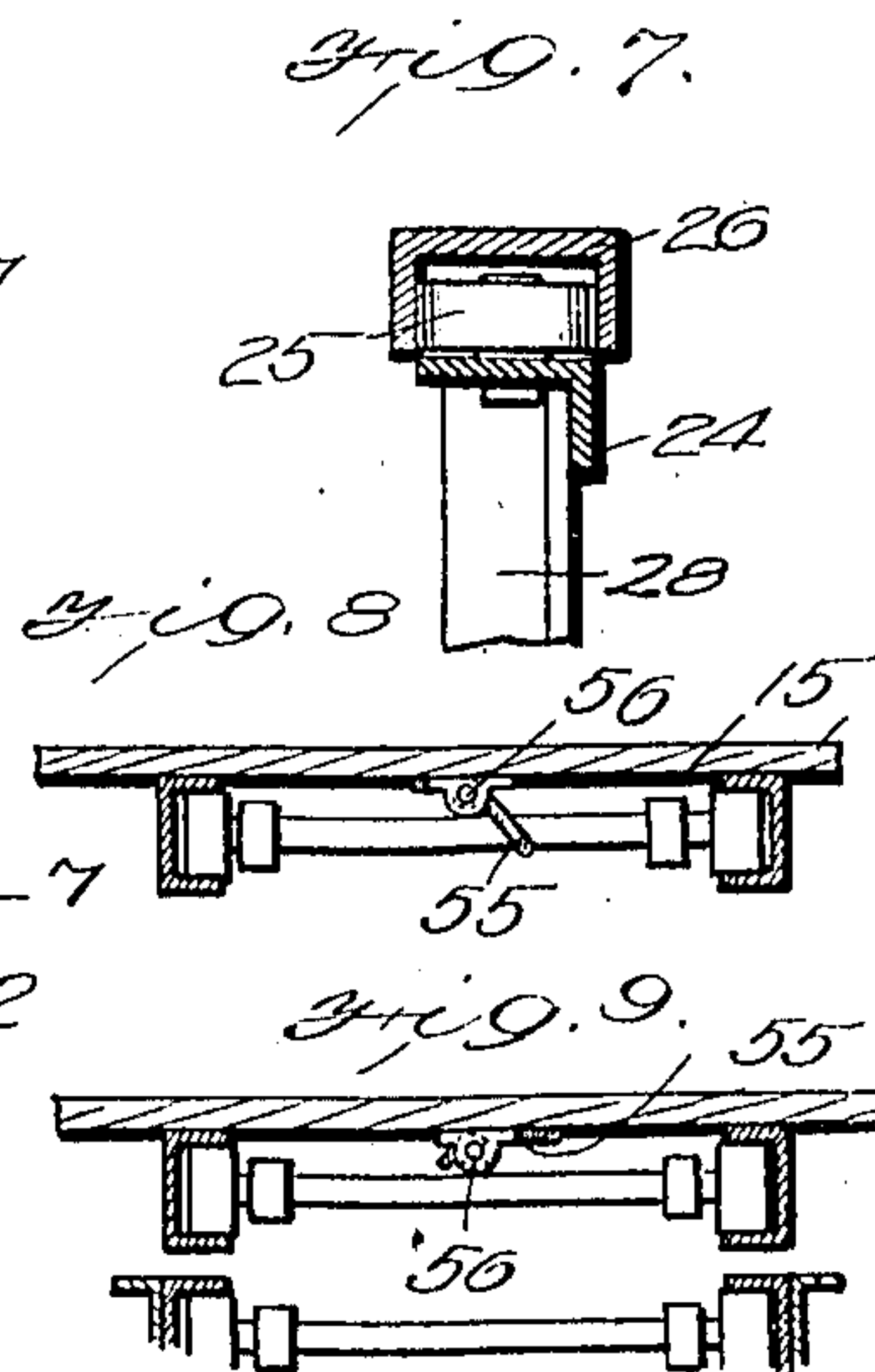
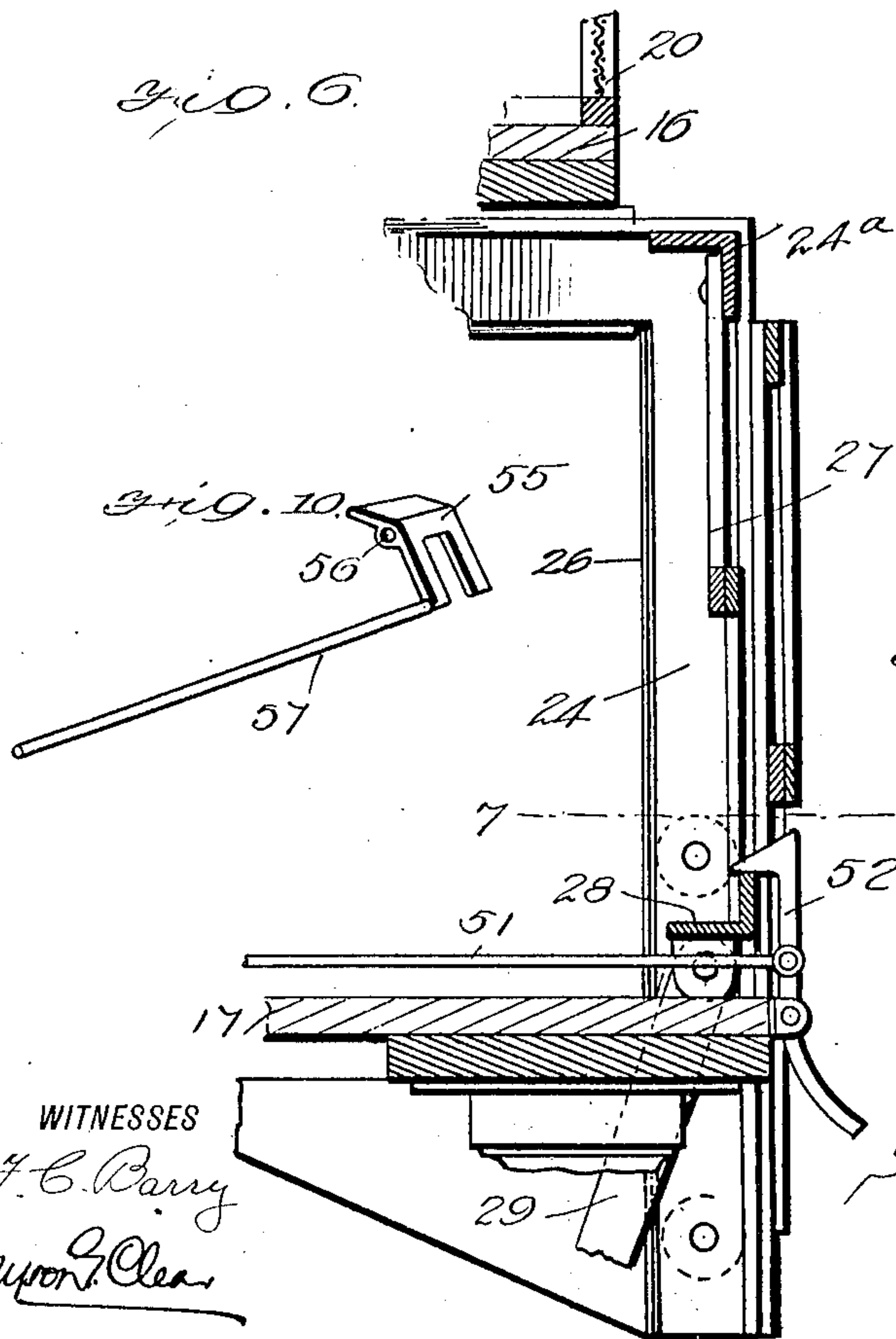
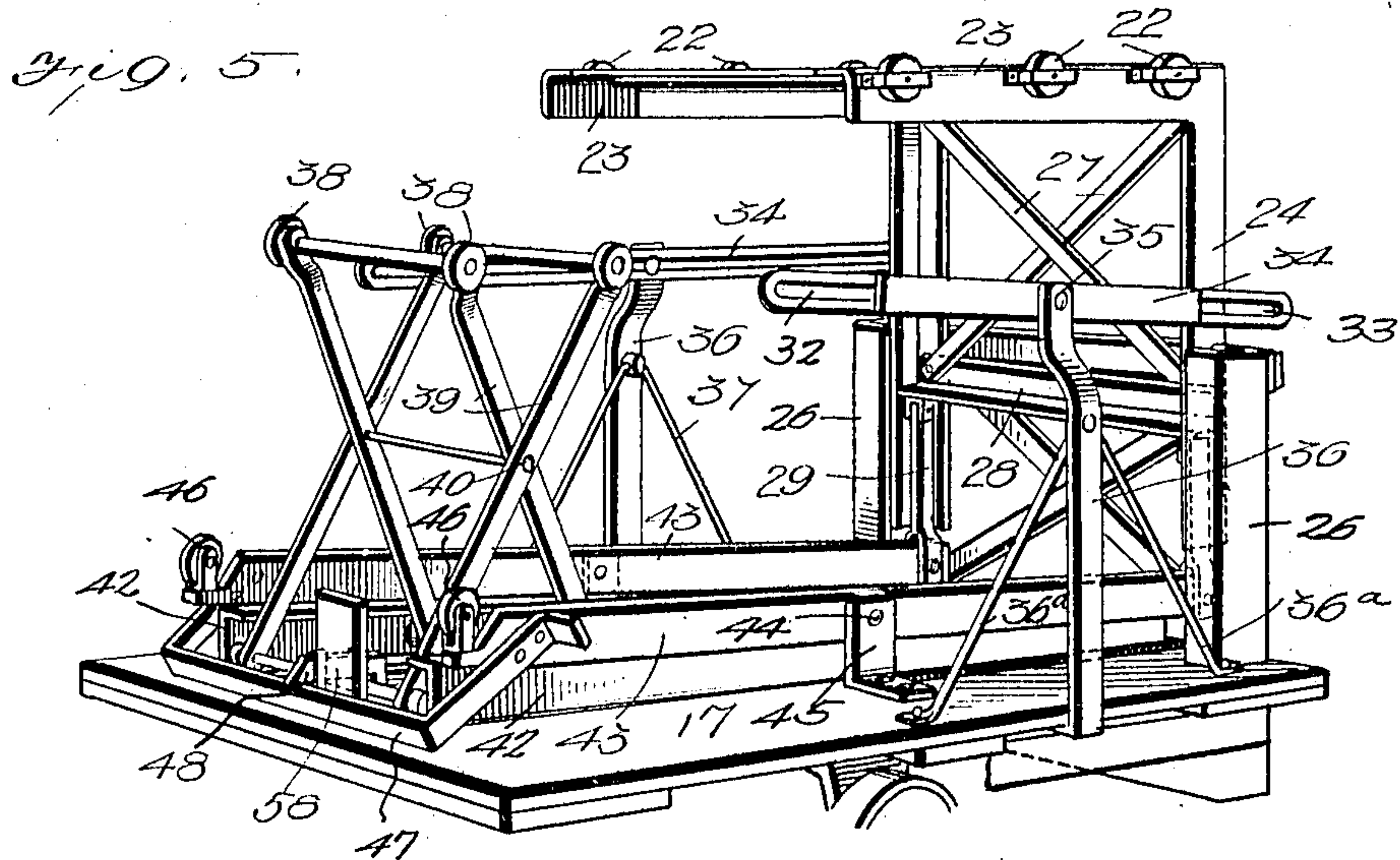
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UNITED STATES PATENT OFFICE.

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TABLE-TRUCK.

1,298,185.

Specification of Letters Patent.

Patented Mar. 25, 1919.

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To all whom it may concern:

Be it known that I, SAMUEL C. DODSON, a citizen of the United States, and a resident of Baltimore, in the State of Maryland, have made certain new and useful Improvements in Table-Trucks, of which the following is a specification.

My present invention relates generally to trucks for transporting articles, and particularly to a partially collapsible truck for transporting merchandise of every description by manufacturers and wholesalers capable of use as a checking table, so as to avoid the necessity of transferring the goods, my object being the provision of certain improvements in table trucks such as illustrated and claimed in my Patent 1,149,995, granted August 10, 1915.

My present improvements, as will be appreciated from the description to follow, avoid the three section table truck of my patent, with the complicated compensating connections therebetween, and purpose a two-section truck which may be more readily and quickly operated and manipulated from one position to another, and will be stronger and more durable, and which will be generally more effective in connection with heavy loads.

In the accompanying drawings illustrating my present improvements, and to which reference is made in the following specification:—

Figure 1 is a side elevation of my improved table truck with its sections horizontally alined;

Fig. 2 is a similar view showing one section raised and the other lowered during their movement to the vertical alined position;

Fig. 3 is a longitudinal sectional view with the sections in vertically alined position;

Fig. 4 is a vertical transverse section taken substantially on line 4—4 of Fig. 3;

Fig. 5 is a perspective view of the frame and movable parts with the tables removed;

Fig. 6 is an enlarged vertical section through one end with the parts in the position shown in Fig. 1;

Fig. 7 is a detail horizontal section taken on line 7—7 of Fig. 6;

Figs. 8 and 9 are detail cross sections through one of the table sections respectively in upper and lower positions, and,

Fig. 10 is a detailed perspective view of the latch of one of the table sections.

Referring now to these figures, the two sections of the table as proposed by my present improvements are respectively indicated at 15 and 16, supported through suitable connections upon a portable truck frame whose main or body portion 17 is disposed horizontally and upon rollers or wheels 18.

Along one side each of the table sections 15 and 16 has a side rail 19, and along one end is provided with an end rail 20, it being noted from Fig. 1 in particular that these end rails are at relatively opposite ends of the two sections, although the side rails 19 are along the same sides thereof.

The section 16, which for convenience of description I will hereafter term the rear section, and that end of the truck frame below the same, the rear end of the truck, is provided longitudinally along its lower surface and adjacent its opposite side edges, with channel bars 21 disposed to open inwardly and adapted to receive therein the rollers 22 along the horizontally extending arms 23 of an angular frame embodying in addition to these horizontal arms 23 vertical arms 24, as most plainly seen in Fig. 5, which latter, as seen in Figs. 6 and 7, have outstanding rollers 25 movably disposed in vertically arranged channel bars 26 rigidly secured to and upstanding from the rear end of the truck body 17, adjacent its opposite sides.

The frame above mentioned which includes the horizontal and vertical portions 23 and 24 has suitable braces 27 and a lower cross bar 28 connects the lower ends of the vertical portions 24, and is pivotally connected adjacent its opposite ends with a pair of depending links 29, the functions of which will be presently made plain.

Thus by virtue of the construction described, the table section 16 is shiftable vertically by virtue of the movable engagement of the vertical arms 24 with the guide channels 26 of the truck, and is shiftable horizontally by virtue of the movable support thereof upon the rollers 22 of the horizontal arms 23, it being obvious from this that the section 16 will be held in horizontal position at all times.

The sections 15 and 16 are respectively provided with laterally outstanding pins or rollers 30 and 31, those of the section 15

being adjacent its rear end, and those of the section 16 being substantially at the center thereof. These pins or rollers engage the longitudinally slotted outer ends 32 and 33 of side bars 34 fulcrumed at a central point at 35 at the upper ends of rigid uprights 36, upstanding from the sides of the truck body 17 at points intermediate the ends of the latter and suitably braced in their connection therewith by braces 36^a, all as plainly seen by a comparison of Figs. 1, 2 and 5. The connections between the sections 15 and 16 by the side bars 34 thus provide for simultaneous movement of these sections either horizontally or vertically and in relatively opposite directions.

The table section 15 has longitudinal channel bars 37, the channels in which are presented inwardly to form guides and for the reception of rollers 38 at the upper ends of the levers 39 fulcrumed to one another intermediate their ends as at 40, and as plainly seen in Fig. 5 to form a lazy tongs. The lower ends of certain of these levers have stationary pivots with the truck body 17 adjacent the forward end of the latter, the lower ends of the other levers having rollers 41 which are slidably disposed within parallel channel beams 42 of the truck body 17 alined below the channel beams 37 of the table section 15, as clearly seen in Fig. 4. This lazy tongs arrangement obviously acts as a support for the table section 15, but more particularly as a support to maintain the same in horizontal position at all times for it is obvious that irrespective of their positions with regard to one another or in relation to truck 17, the table sections must be maintained in horizontal position or otherwise the material loaded thereon would be permitted to slide off of the same during their adjustment.

The table 15 in its upper position where it is horizontally alined with the section 16, as seen in Fig. 1, is further supported by side levers 43 intermediately fulcrumed at 44 upon lugs 45 upstanding from the truck body 17 and having rollers 46 at their forward ends which in the position stated, bear upwardly against the table section 15. The rear ends of these levers 43 are pivotally connected to the lower ends of the links 29 previously described, so that lowering movement of the section 16 forces the rear ends of the levers 43 downwardly and forces their forward roller mounted ends upwardly to the supporting position in connection with table section 15. To accommodate the rear ends of the levers 43 the truck body 17 is of course provided with longitudinal slots, one of which is visible in Fig. 5.

The forward ends of the levers 43 just above mentioned, are connected by an angularly disposed U-shaped latch member 47, which is movable downwardly with the said

levers when the section 15 is lowered and the section 16 raised from the horizontally alined position of Fig. 1 preparatory to movement to the vertically alined position of Fig. 3. This latch arm 47 in the lowered position is engaged by a forwardly projecting latch bolt 48 mounted in a bearing 49 upon the rear portion of the truck body 17, the rear end of the latch bolt being engaged by a rearwardly extending rod 50 having a spring 51 permitting the latch bolt to yield rearwardly. The rear end of the latch rod 50 is pivotally connected to a latch hook 52 fulcrumed at the rear portion of the truck body, which latch hook is arranged to engage the lower cross bar 28 of the movable supporting frame of the table section 16 when the latter is lowered in the position of Fig. 1.

Thus to move the table sections from the horizontally alined position of Fig. 1 to the vertically alined position of Fig. 3, it is first necessary to release the latch hook 52 from the cross bar 28, and then press downwardly upon table section 15, forcing table section 16 upwardly at the same time to the position shown in Fig. 2, by virtue of the connecting levers 34 and their connections with the table sections. When in the position shown in Fig. 2, either one or the other of the table sections may be grasped and shifted longitudinally so as to move both of said sections into substantial vertical alinement as in Fig. 3.

It will further be observed that the channel bars 37 of the table section 15, as well as the channel bars 42 of the truck body, have relatively engageable side rollers 53 and side rails 54, which come into engagement in the manner particularly seen in Fig. 4, when the table section 15 is lowered to the position of Fig. 2, and which act during horizontally sliding movement of the table section 15 rearwardly from the position of Fig. 2 to the position of Fig. 3, and it is thus to be observed that each and every movement of the two table sections is had upon rollers, so as to avoid undue friction, and obviate necessity of their exertion in adjusting the table sections from one position to the other when loaded.

It is obvious that the construction provided by my present invention will be strong and durable, its strength providing for use of the apparatus in connection with loads of considerable weight, such as for instance piled up bolts of fabric and like material for the transportation of which from floor to floor of a building upon elevators the apparatus is particularly designed. In such use the table sections after being loaded and checked at the sending station, while in the horizontally alined position of Fig. 1, are adjusted to the vertically alined position of Fig. 3, when the truck is rolled

on to an elevator, and after being rolled off of the elevator in such position on the receiving floor may be again readily adjusted to the horizontally alined position and checked at the receiving station.

It will also be observed by reference to Figs. 1 and 8 to 10 inclusive, that the upper cross bar of one of the lazy tongs levers 39 is latched in connection with the table section 15 when the latter is in the outer or extended position by means of a slotted gravity latch plate 55 pivoted at 56, beneath the table section 15 and having an extended arm 57 projecting longitudinally beneath the said label section toward the forward or outer end of the latter. Thus longitudinal movements of the table section 15 in the raised position shown in Fig. 1, which would cause a constant bumping of this table section with the table section 16, are avoided, although the arm 57, which comes into engagement with the stationary upright releasing plate 58 of the lower support, when the table section 15 is lowered, provides for automatic release of the latch so that when lowered to the position of Fig. 2 the table section 15 will then be freely shiftable longitudinally of the lower support. This is to be observed particularly by comparison of Figs. 8 and 9, the former of which shows the latch 55 in engaged position and the latter of which shows the latch in disengaged position with the table section 15 lowered.

By reference to Fig. 3 in particular, it will also be noted that the table section 16 carries upon its under surface a pair of longitudinally alined gravity latch bars 59 and 60, having overlapping extensions at 61 so that elevation of the outer end of the forward latch bar 16 will cause similar elevation of the inner end of the forward latch bar 59. These latch bars are notched to engage the cross bar 24^a at the angle of the frame including the horizontal portions 23 and vertical portions 24 before described, respectively in the outer and inner positions of the said table section. In the inner position as seen in Fig. 3, the latch bar 60 is engaged as shown and must be disengaged before the table section 16 can be shifted forwardly upon the rollers 22. In the position seen in Fig. 1, the latch bar 59 would be engaged with the cross bar 24^a and must be released before table section 16 can be shifted horizontally from the position of Fig. 2 to the position of Fig. 3.

It is obvious in thus providing for the latching of the table sections in the several positions my invention obviates all danger of their accidental displacement in transportation upon elevators and the like, jolts and jars of which might otherwise serve to shift the table sections into engagement with adjacent movable or immovable articles in the course of its operation.

I claim:—

1. In a table truck, the combination of a roller mounted support, a table in sections, each of which is movable rectilinearly in vertical and horizontal directions with respect to the support, and levers fulcrumed upon a portion of the said support and having movable connections at opposite ends with the said table sections to constrain the latter to movement in relatively opposite directions.

2. In a table truck, the combination of a roller mounted support, a table in sections, movable vertically and horizontally with respect to the said support, uprights adjacent one end of the support, an angular frame having vertical portions provided with rollers engaging the said uprights and having a horizontal portion provided with rollers engaged by one of the table sections, a pair of uprights intermediate the ends of the support, and levers fulcrumed upon the latter uprights and having movable connection at their opposite ends with the said table sections, for the purpose described.

3. In a table truck, the combination of a roller mounted support, a table in sections movable vertically and horizontally with respect to the said support, uprights adjacent one end of the support, an angular frame having vertical portions provided with rollers engaging the said uprights and having a horizontal portion provided with rollers engaged by one of the table sections, a lazy tongs connecting the other table section to the relatively opposite end of the support, a pair of uprights intermediate the ends of the support, and levers fulcrumed upon the latter uprights and having movable connection at their opposite ends with the said table sections, for the purpose described.

4. In a table truck, the combination of a roller mounted support, a table consisting of sections movable vertically and horizontally with respect to the said support, and having independent connection therewith, lever connections between the said table sections to constrain the same to movement in relatively opposite directions, means engageable with certain of the supporting connections of one of the table sections for locking the table sections in horizontally alined position, and other means engageable with the supporting connections of the other of said table sections for locking the table sections in vertically alined position.

5. In a table truck, the combination of a roller mounted support, a pair of table sections having independent supporting connections with the said support, limiting the same to movement vertically and horizontally in straight lines with respect to said support, connections between the said table sections whereby to cause their movement

simultaneously in relatively opposite directions, means for locking the two sections in horizontally alined position, and means for locking the said sections in vertically alined position.

6. In a table truck, the combination of a roller mounted support having a horizontal body provided with longitudinal guide members and with uprights adjacent one end and at a point intermediate the ends thereof, a pair of table sections one of which has guides longitudinally thereof, a lazy tongs movably engaging the guides of the said table section and the said support, an angular frame having horizontal and vertical portions upon the former of which the other of said table sections is movably disposed and the latter of which is movably engaged with the end uprights of the said support, and levers fulcrumed upon the intermediate uprights of the support and having movable connections at their opposite ends with the table sections, substantially as described.

7. In a table truck, the combination of a

roller mounted support having a horizontal body provided with longitudinal guide members and with uprights adjacent one end and at a point intermediate the ends thereof, a pair of table sections one of which has guides longitudinally thereof, a lazy tongs movably engaging the guides of the said table section and the said support, an angular frame having horizontal and vertical portions upon the former of which the other of said table sections is movably disposed and the latter of which is movably engaged with the end uprights of the said support, levers fulcrumed upon the intermediate uprights of the support and having movable connections at their opposite ends with the table sections, and levers intermediately fulcrumed upon the support and having rollers at one end for engagement with the table section supported by the lazy tongs, said last named levers having connections at their opposite ends with the movable frame of the other table section, for the purpose described.

SAMUEL C. DODSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."