

No. 768,141.

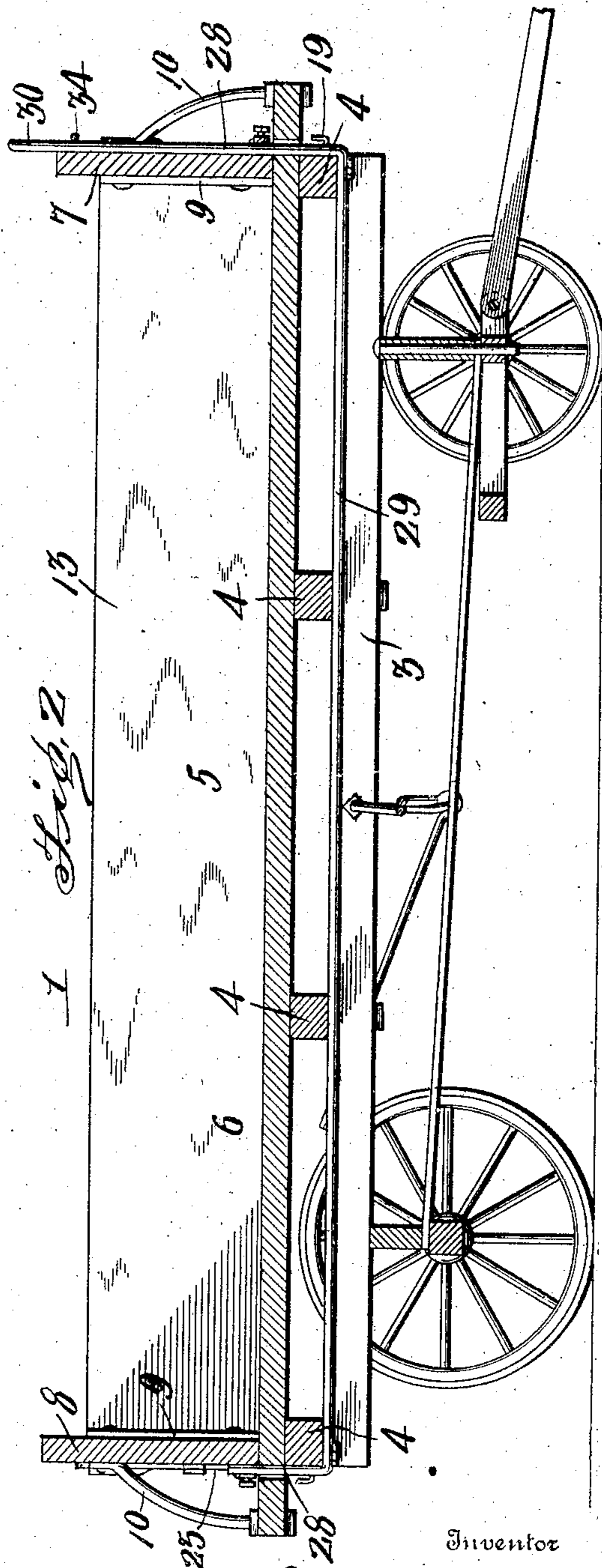
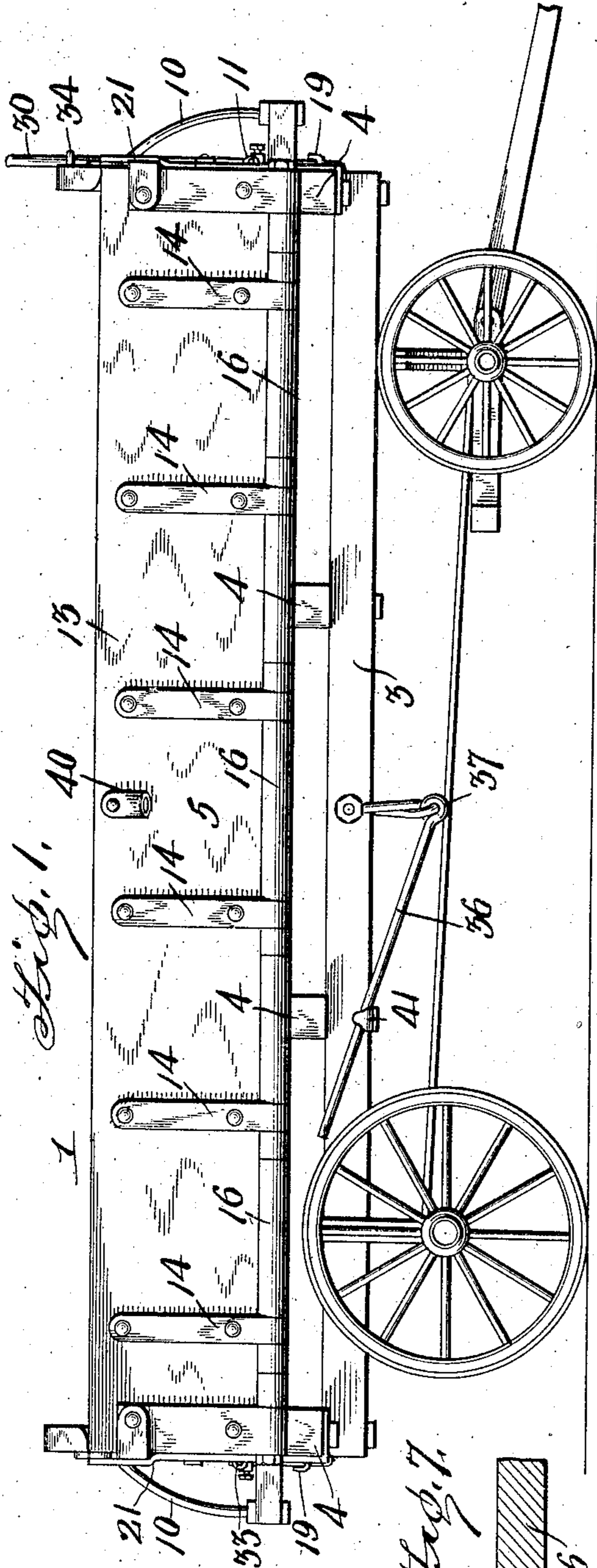
PATENTED AUG. 23, 1904.

O. OLSON.
WAGON.

APPLICATION FILED MAR. 28, 1904.

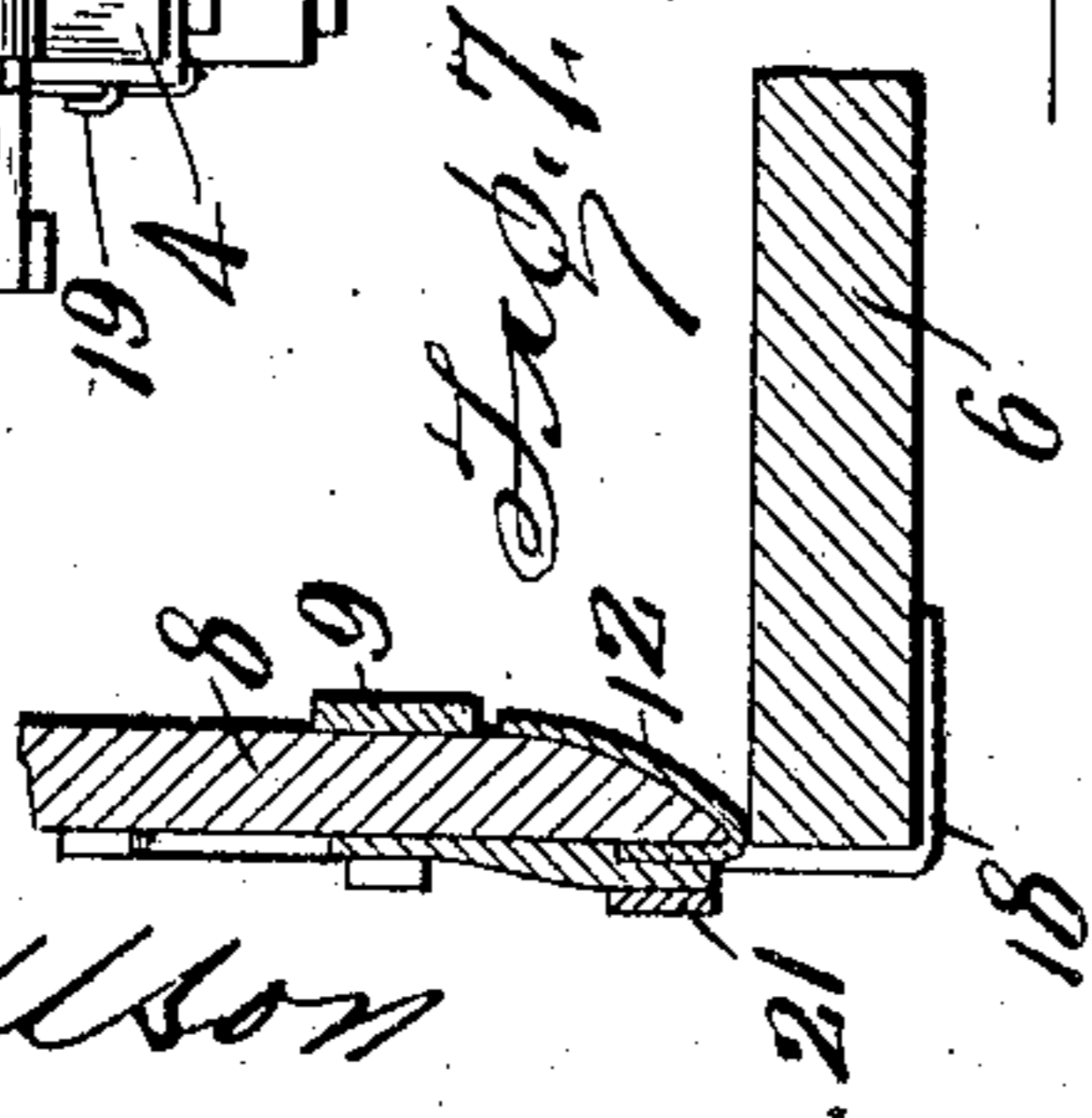
NO MODEL.

3 SHEETS—SHEET 1.



Witnesses
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3 SHEETS—SHEET 2.

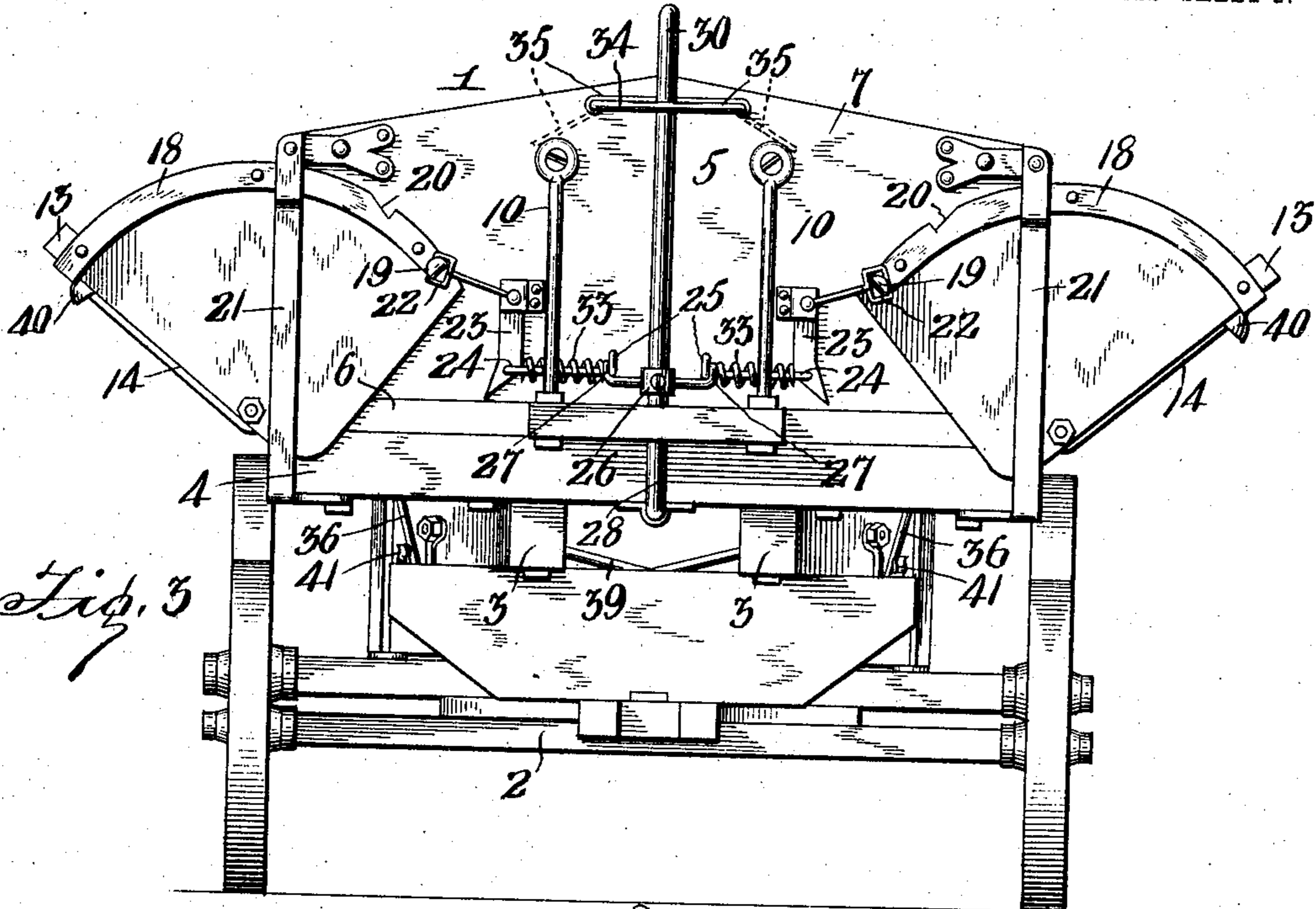


Fig. 3

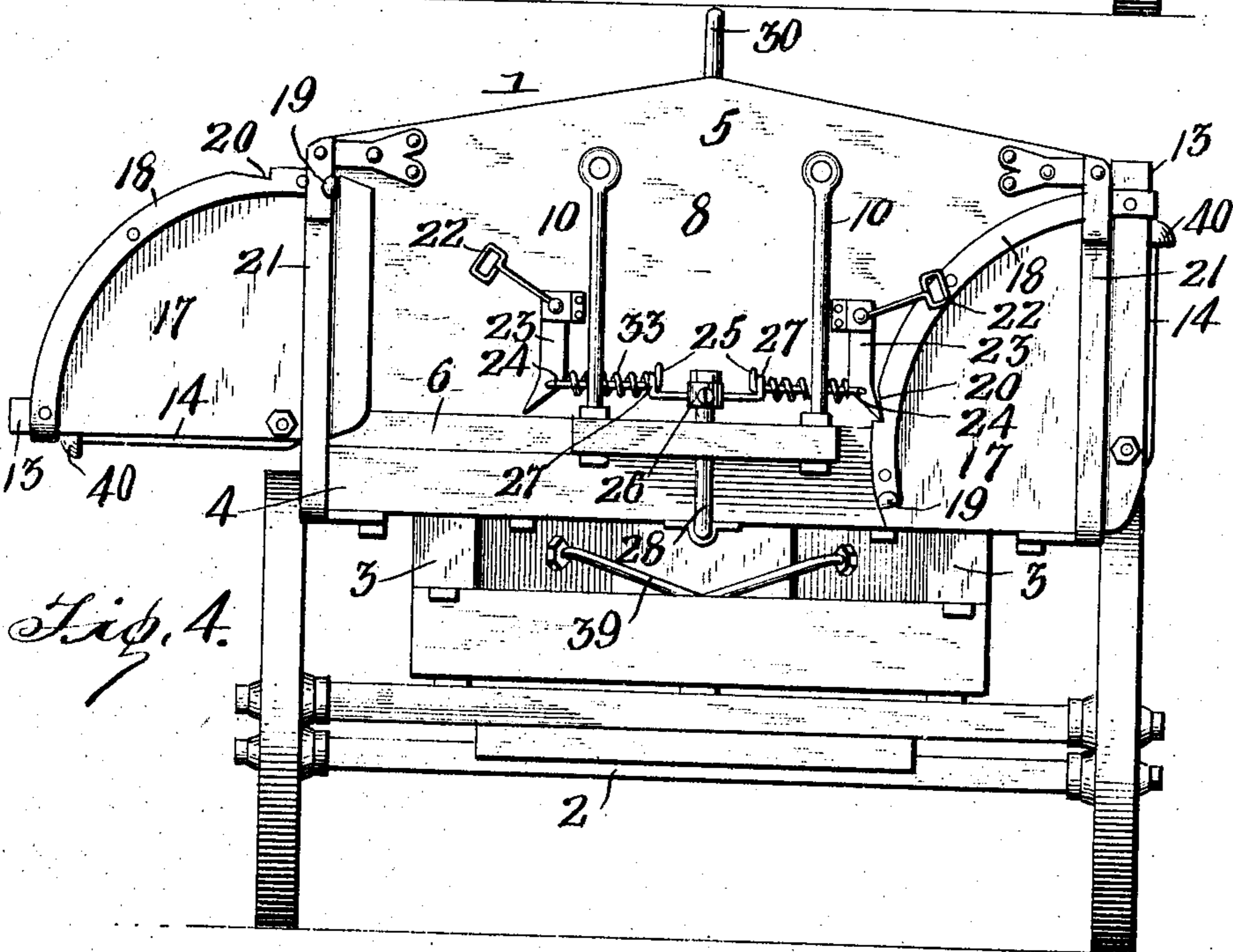


Fig. 4

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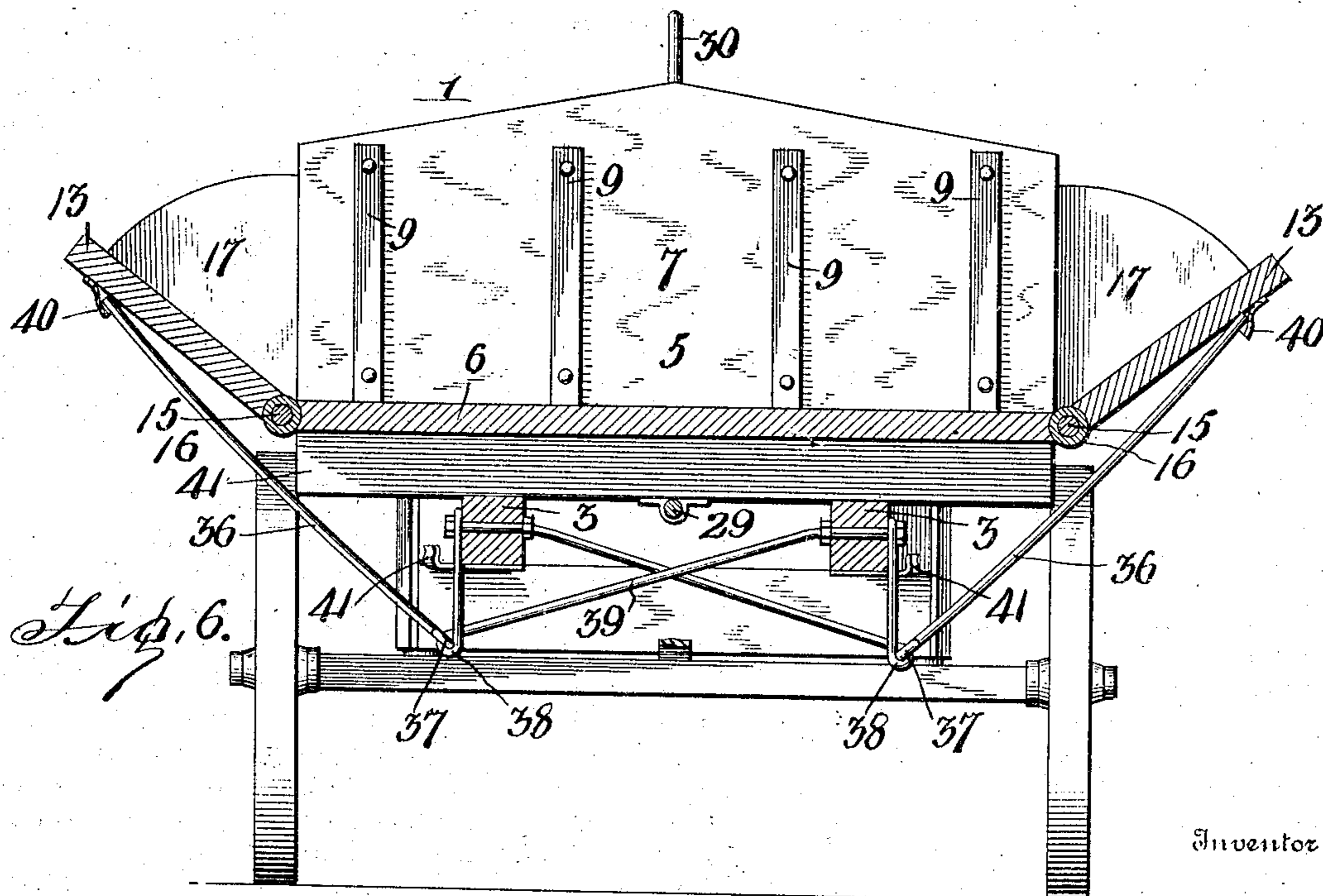
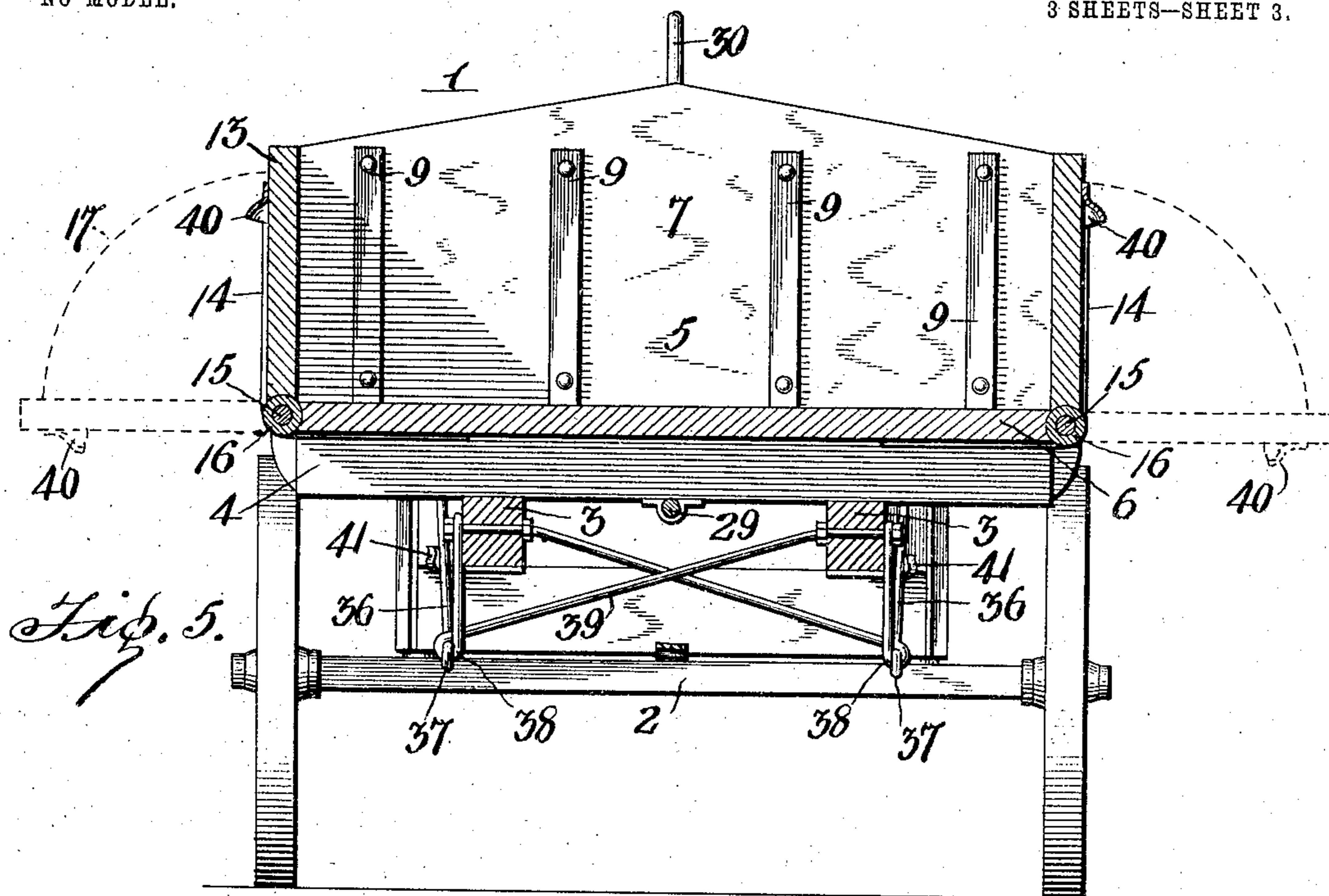
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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

OLIVER OLSON, OF VALPARAISO, NEBRASKA.

WAGON.

SPECIFICATION forming part of Letters Patent No. 768,141, dated August 23, 1904.

Application filed March 28, 1904. Serial No. 200,418. (No model.)

To all whom it may concern:

Be it known that I, OLIVER OLSON, a citizen of the United States, residing at Valparaiso, in the county of Lancaster and State of Nebraska, have invented certain new and useful Improvements in Wagons; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in wagons.

The object of the invention is to provide a general utility wagon for farm use the sides of which may be quickly lowered to facilitate the discharge of the contents of the wagon and also the loading of the same.

A further object is to provide a wagon of this character which will be simple in construction, strong, durable, inexpensive, and adapted to be used for many purposes.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side elevation of a wagon having a body constructed in accordance with the invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is an elevation of the front end of the wagon, showing the side partly lowered. Fig. 4 is a rear end view, showing one side of the wagon up and the other side lowered. Fig. 5 is a vertical cross-sectional view with the sides of the wagon up and in dotted lines showing the same lowered. Fig. 6 is a similar view showing the sides partly lowered. Fig. 7 is a detail horizontal sectional view through one corner of the wagon.

Referring more particularly to the drawings, 1 denotes the wagon, having the usual or any suitable running-gear 2. On the front and rear bolsters of said running-gear is supported the wagon bed or frame, consisting of longitudinally-disposed sills 3, on which are supported cross-sills 4, to which are secured the wagon-body 5, consisting of a floor portion 6, to which is rigidly secured the front

and rear ends 7 and 8 of the box, said ends being connected to the floor by strap-bolts 9 and are also braced by curved brace-bars 10, which are connected at their upper ends to the outer side of the end-boards and at their lower ends to an extension of the floor. The side edges of the end-boards are beveled to an edge and are bound with sheet-metal plates 12.

The sides 13 of the wagon are hingedly connected to the floor 6 by means of a series of strap-hinges 14, one member of each hinge being connected to the outer side of the side-boards and the adjacent member to the under side of the wagon-floor, and through the aligned eyes of said hinge members is inserted a pivot bolt or rod 15, by which said hinge members are pivotally connected together. On the bolt or rod 15 between each hinge is arranged a spacing-sleeve 16, which braces the hinge members and closes the space between the edges of the side and bottom to prevent the contents of the wagon-body from falling through said space. To more fully close said space, the adjacent edges of the floor and sides are convex or rounded out to closely fit the eyes of the hinge members and the tubular spacing-sleeves 16.

On the ends of the side-boards are secured segmental metal plates 17, on the outer faces and around the curved edges of which are secured curved brace-bars 18, the lower or inner ends of which are bent to form hooks 19, and in the outer edges of said curved bars 18 is formed a notch 20. When the sides of the wagon-box are closed, the segmental plates are adapted to lie against the outer faces of the ends of the wagon, and when said sides are open said plates are swung outwardly and close the angle between the side and the edge of the end-boards. The plates 17 are guided and supported by bars 21, which are connected to and spaced from the ends of the wagon adjacent to each edge of the same. When the side-boards are in opened position, the hooked ends 19 of the curved bars 18 are engaged with the bars 21, thereby holding the sides in a horizontal position. When it is desired to hold the sides in a partly-opened position, the hooked ends 19 are engaged by loops or eyes 22, which are pivotally connected to the ends

of the wagon, this construction and arrangement being clearly shown in Fig. 3 of the drawings.

In order to hold the sides in an upright or closed position, a locking mechanism is provided at each end of the wagon which consists of pawls 23, pivotally connected to the outer side of the front and rear ends of the wagon and adapted to be engaged with the notches 20 in the curved brace-bars 18, thereby preventing the outward movement of the sides. To the pawls 23 are pivotally connected short rods 24, the inner ends of which are bent upwardly to form hooks 25. To the rods 24 are slidably connected the laterally-projecting arms of cross-heads 26, said arms being formed with eyes or loops 27, through which the rods 24 pass. The cross-heads 26 are secured to the cranked ends 28 of a rock-shaft 29, which is suitably mounted in bearings on the under side of the wagon and has its ends turned up at the front and rear of the wagon to form said crank 28, on which are secured the cross-heads 26. The crank 28 at the front end of the wagon is continued upwardly and forms an operating-lever 30, by which said crank-shaft may be rocked. When the lever 30 is swung in one direction or the other, the crank-arms 28 will also be moved in the same direction, which will cause the cross-heads 26 to pull upon the hooked rods 24 and withdraw the pawls 23 on the front and rear ends of the wagon from the notches 20 in the curved brace-bars 18, thereby releasing one side of the wagon and permitting the same to be turned down. A movement of the lever 30 in the opposite direction will in the same manner release the opposite side, as will be understood.

The pawls 23 are normally held in engagement with the notches 20 by means of coiled springs 33, arranged on the short hooked rods 24, said springs being confined between the pawls 23 and the eyes or loops 27, through which said rods pass.

The upper end of the lever 30 passes through a guide-loop 34, secured to the forward end of the wagon, and on the ends of said loop are pivoted locking pawls or dogs 35, which are adapted to be swung into engagement with each side of the lever 30 to hold the same against movement by the jarring or jolting of the wagon over rough roads.

In order that the sides may be more firmly supported when in a partly-opened position, brace-rods or props 36 are provided, said rods being provided on their inner ends with an eye 37, which engages an eye 38, formed on a bracket 39, secured to the longitudinal sills of the wagon-bed, as shown. The outer ends of the brace-rods are adapted to engage a socket 40, secured to the sides of the wagon, said rods being of such length as to permit the sides to open slightly more than half-way before being engaged with said sockets. When

not in use, the brace-rods 36 are adapted to be swung up alongside the longitudinal sills of the wagon-bed and are supported by hooks or brackets 41, secured to said sills.

A wagon constructed as herein shown and described is particularly adapted for use as a feed-wagon for transporting feed for stock from the granary or storehouse to the feeding troughs or boxes in the fields, and in so using the wagon is driven up alongside a feeding trough or box and the adjacent side of the wagon let wholly or partly down and some of the grain pushed out into the feed-box without wasting any of the same on the ground. After depositing a sufficient quantity of feed in this box the wagon is driven to the next, and so on. The lowering of the sides of the wagon is also advantageous at other times, such as when loading, as the material does not have to be raised so high when the sides are let down. When loading grain or the like from a granary or crib, the wagon may be driven alongside the same and the sides let down against the sides of the granary, thereby forming a chute which will prevent the waste of the grain when being loaded into the wagon.

A wagon constructed in the manner described will also be found useful as a fertilizer-distributor, for by letting the sides down the fertilizer may be simply shoved off the sides and scattered over the field.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A wagon box or body, having a floor, ends rigidly secured and braced to said floor, sides hinged to the same to swing outwardly, segmental plates secured to the ends of said sides to engage the outer sides of the end pieces of the wagon, guide-bars arranged across said plates, hooks secured to said plates to engage said guide-bars and hold said sides in open position, loops or eyes pivotally connected to said ends to engage said hooks and hold said sides in partly-open position, substantially as described.

2. A wagon box or body, having a floor, ends rigidly secured and braced to said floor, sides hinged to the same to swing outwardly, segmental plates secured to the ends of said sides to engage the outer sides of the end pieces of the wagon, guide-bars arranged across said plates, brace-bars secured to said plates and having hooked ends to engage said guide-bars

and support said sides in open position, pawls pivoted to the ends of said wagon to engage a notch or tooth on said bar to hold said sides in closed position, means for normally engaging said pawls with said notches or teeth, and means whereby the same may be retracted or disengaged from the same, substantially as described.

3. A wagon box or body, having a floor, ends rigidly secured and braced to said floor, sides hinged to the same to swing outwardly, segmental plates secured to the ends of said sides to engage the outer sides of the end pieces of the wagon, guide-bars arranged across said plates, brace-bars secured to said plates and having hooked ends to engage said guide-bars and support said sides in open position, pawls pivoted to the ends of said wagon to engage a notch or tooth on said bar to hold said sides in closed position, springs for normally engaging said pawls with said notches, a rock-shaft journaled on said wagon and having cranked ends, sliding connections between the cranked ends of said shaft and said pawls whereby the same may be released, an operating-lever formed on one end of said crank-shaft, and means whereby said lever may be

locked against movement in either direction, substantially as described.

4. A wagon box or body, having a floor, ends rigidly secured and braced to said floor, sides hinged to the same to swing outwardly, segmental plates secured to the ends of said sides to engage the outer sides of the end pieces of the wagon, guide-bars arranged across said plates, hooks secured to said plates to engage said guide-bars and hold said sides in open position, loops or eyes pivotally connected to said ends to engage said hooks, and hold said sides in partly-open position, props or brace-bars pivotally connected to the frame of said wagon and adapted to be swung into position to engage said sides when partly open thereby forming an additional support for the same when in this position, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

OLIVER OLSON.

Witnesses:

F. R. BRIDGES,
D. H. HEDGES.