

No. 785,628.

PATENTED MAR. 21, 1905.

J. B. MOWRY.  
WAGON.

APPLICATION FILED JULY 8, 1904.

2 SHEETS—SHEET 1.

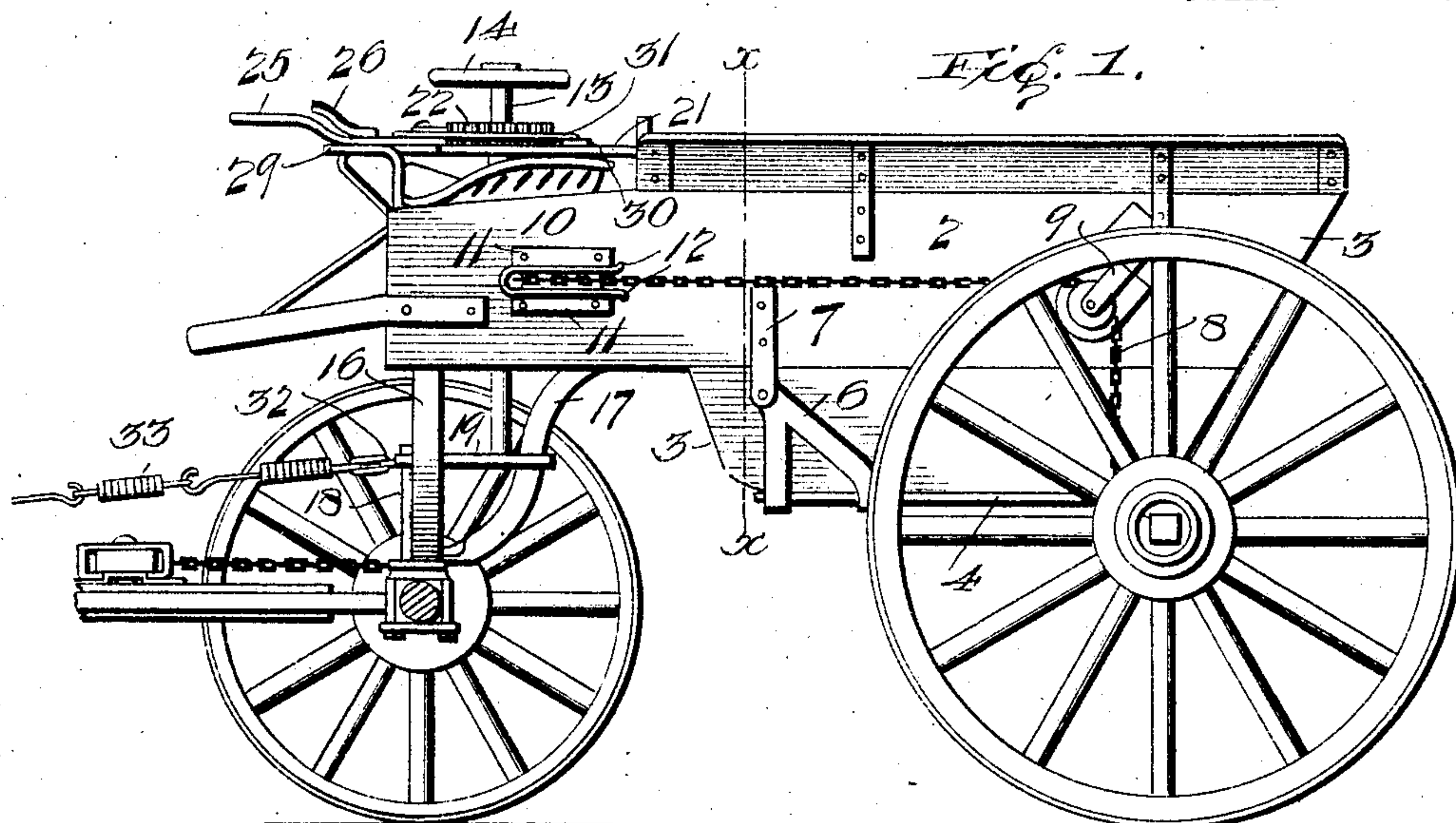
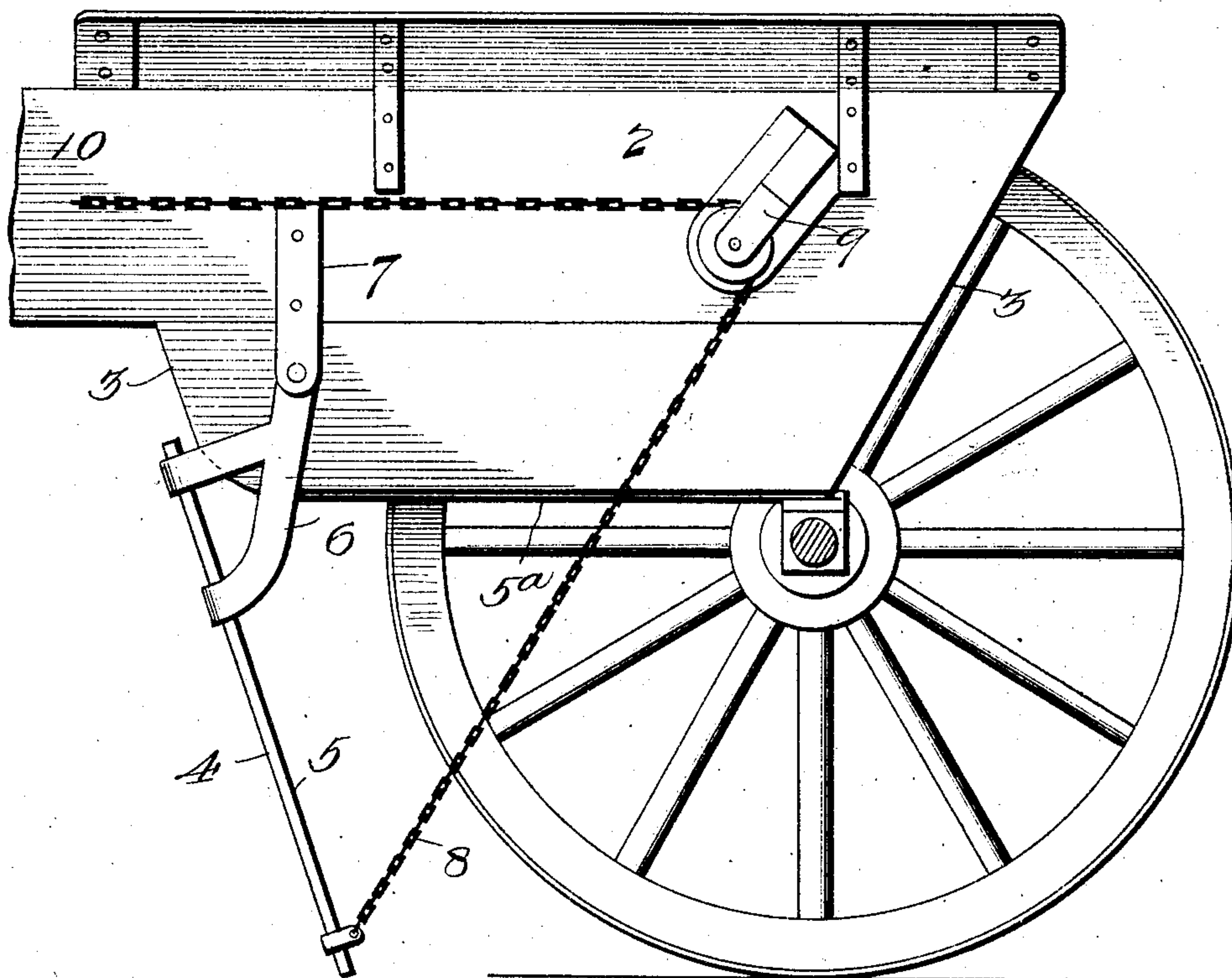


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

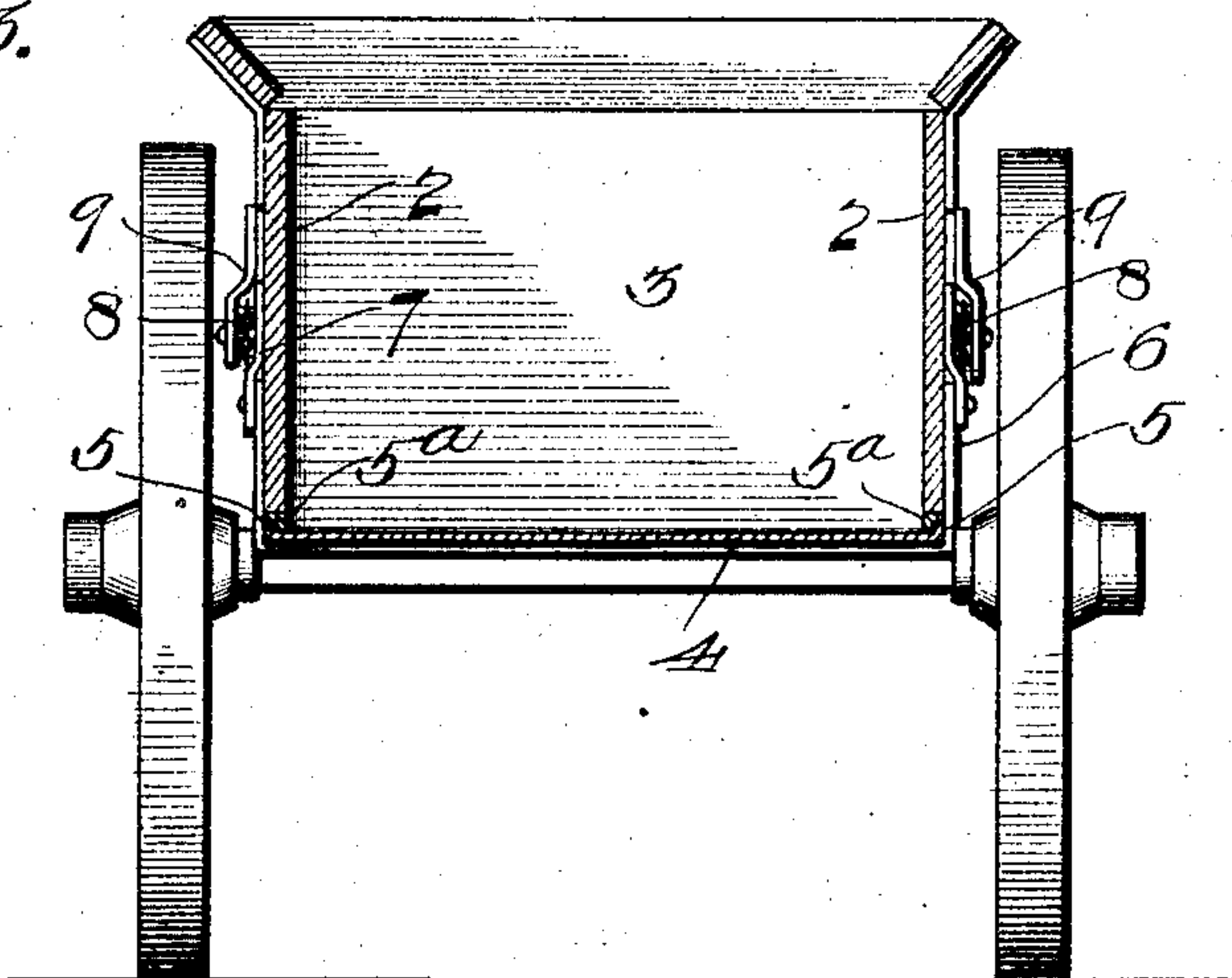


Fig. 4.

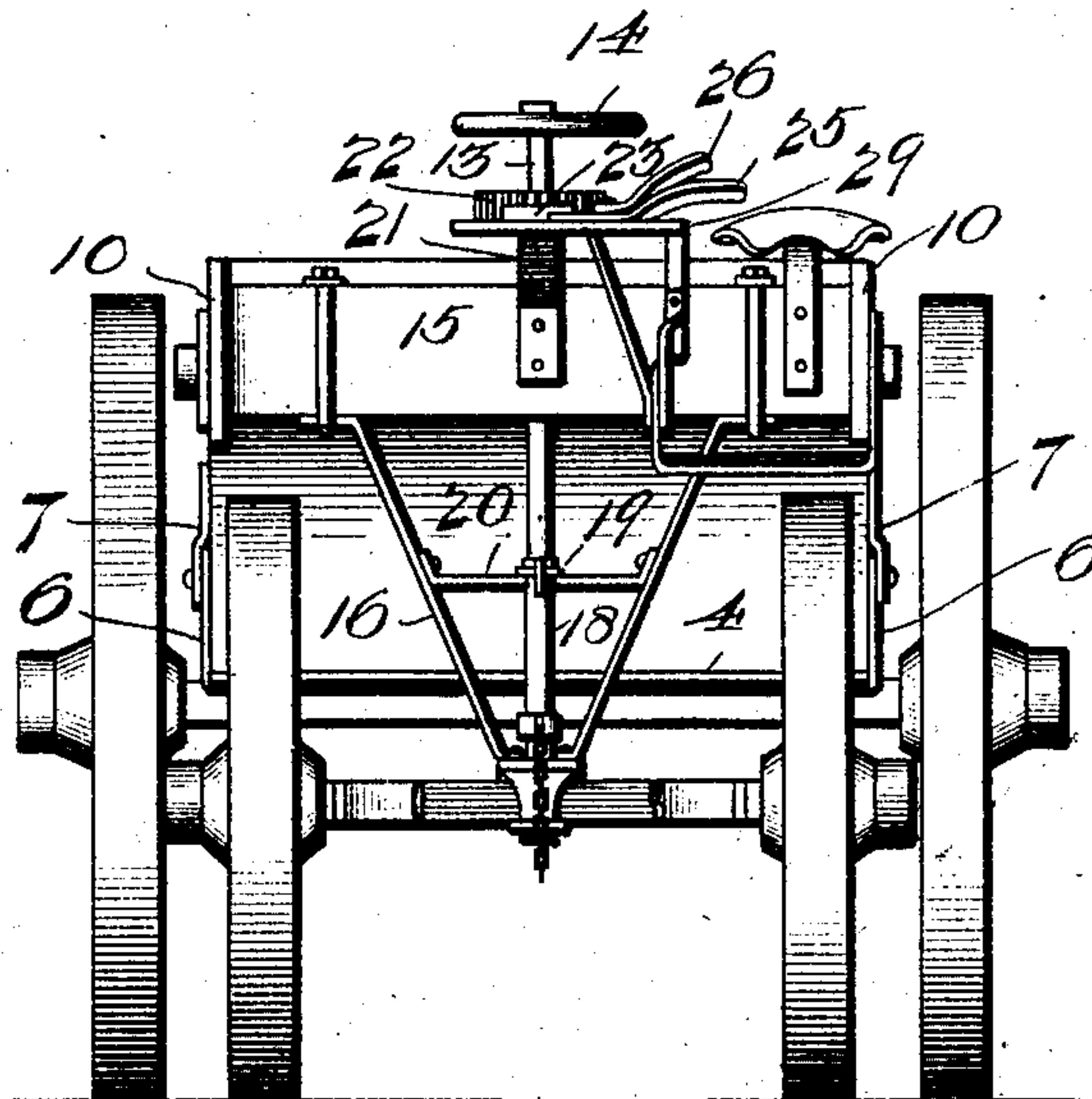
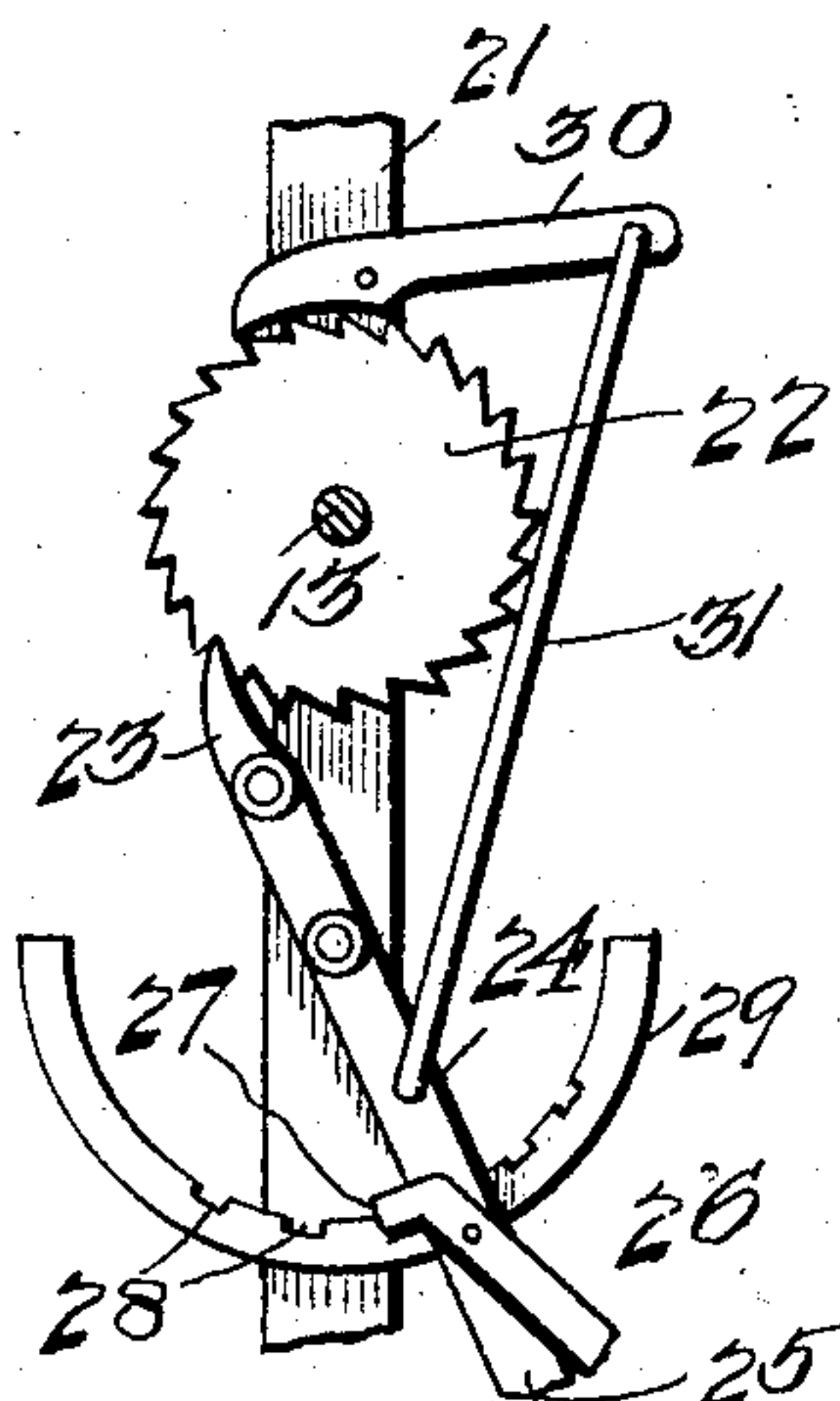


Fig. 5.



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# UNITED STATES PATENT OFFICE.

JOSEPH B. MOWRY, OF CLEVELAND, OHIO, ASSIGNOR OF NINETY-EIGHT TWO-HUNDREDTHS TO WILLIAM LARSON AND JOSEPH E. SMITH, OF CLEVELAND, OHIO.

## WAGON.

SPECIFICATION forming part of Letters Patent No. 785,628, dated March 21, 1905.

Application filed July 8, 1904. Serial No. 215,771.

*To all whom it may concern:*

Be it known that I, JOSEPH B. MOWRY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Wagons; and I do hereby 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.

My invention relates to improvements in wagons. It has for its object, among others, to provide an improved dumping attachment.

The invention consists in certain features of construction which render the dumping of the entire contents of the wagon more easily accomplished, means for operating and controlling the dumping attachment, and certain novel features of construction of support between the front axle and the forward portion of the wagon.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a side elevation of a wagon constructed in accordance with my invention, the drop up, and part of the front wheel broken away to disclose the front support. Fig. 2 is a broken side elevation of the rear portion of the wagon with the drop down. Fig. 3 is a cross-sectional view on line  $x-x$  of Fig. 1. Fig. 4 is a front elevation of the wagon, and Fig. 5 is a plan view of the drop-lowering-controlling mechanism.

Referring more particularly to the drawings, the wagon-body comprises, preferably, vertical sides 2 and inwardly-sloping end portions 3 to insure the delivery of all the contents during the dumping operation. The bottom of the body is formed of a preferably metal drop-plate 4, provided with an upwardly-turned flange 5 around its forward and side edges. Angle-irons 5<sup>a</sup> are preferably secured to the lower edges of the sides and end of the body, which angle-irons are engaged by the flanges on the drop-plate when it is raised. Said plate is pivotally attached to the body of the wagon by hinges 6, one on each side, and comprising bracket portions 7,

secured to the wagon-body, and other V-shaped portions pivoted to said bracket at the juncture of the arms of the V and said arms bent under and secured to the forward portion of said plate. It will be noted that the rearward-extending arm of the V-shaped portion of the hinge adds greatly to the strength and support of the drop-plate. Chains 8 are fastened to said plate near its rear end and pass up around pulleys arranged in diagonally-arranged brackets 9, which are placed in this position so that they will about bisect the lines of force extending to said plate and forward end of the wagon, where said chains pass other pulleys arranged horizontally in slots in extensions 10 of the sides of the wagon-body. Around said slots and leading to them are arranged guides comprising angle-bars 11, bolted or otherwise fastened to the extension 10, the projecting flange passing around the front end of said slot and from thence parallel to each other backward to a short distance past the rear end of the slot. The lower end of said flange is preferably bent slightly downward, as at 12, to better guide the chain between the flanges. The extremities of the chains are fastened to an upright shaft 13, carrying a hand-wheel 14 at its upper end.

The front end of the wagon—that is, the forward extension formed by the side extensions 10 and a cross-piece 15—is supported upon the axle by a V-shaped bracket 16, secured to the cross-piece 15, and a single-arm bracket 17, secured to the forward sloping end of the wagon-body.

The king-bolt 18 passes up through apertures in the flattened point of the V-shaped bracket and the end of the bracket-arm 17 and has its upper end journaled in a brace-bar 19, secured to the arm 17 and to a cross-piece 20 of the bracket 17. The lower end of the shaft or standard 13 is seated in a perforation in said cross-piece 20, and it is guided near its upper end in a piece 21, fastened to the forward end of the wagon-body and the cross-piece 15. Above said cross-piece said standard is provided with a ratchet-wheel 22,



adapted to be engaged by a catch or lug 23 on a pivoted arm 24, having handle portion 25, provided with a locking-handle 26, pivoted to the arm 24, and having a lug 27 adapted to engage notches 28 in a frame 29, arranged in the path thereof. A brake comprising a pivoted lever 30 is arranged at the other side of the ratchet-wheel and is connected by an arm 31 to the arm 24, whereby the operation of said arm 24 to release the wheel to permit the unwinding of the chains to lower the drop will bring the end of said bar 30 into contact with said wheel, preventing the sudden fall of the drop, which would soon wear its edge all out of shape.

A hook 32 may be fastened to the end of the bar 19 and a chain having spring-links 33 caught over it to support the tongue.

I am aware that changes may be made in my invention without departing from the spirit or sacrificing the advantages thereof. I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

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

1. In a wagon, the combination with the body, of a hinged bottom plate, a chain fastened to said plate, the body having an opening for the passage of said chain, a guide for said chain to said opening comprising an angular piece having an outwardly-projecting flange extending along from each side of the opening, and means for actuating said chain to raise and lower said plate.

2. In a wagon, the combination with the body having a forward extension, of a support for the forward end of said body comprising

a V-shaped bracket secured to said forward extension and having a cross-piece, a single-armed bracket secured to the front of the body, and a king-bolt secured to the axle and passing up through apertures in said brackets and having its upper end journaled in a rod connecting said brackets.

3. In a wagon, the combination with the body having a forward extension, of a hinged bottom plate, a support, for the forward end of said body, comprising a V-shaped bracket secured to said forward extension and having a cross-piece and a single-armed bracket secured to the front of the body, a bar connecting said single-armed bracket with said cross-piece, a king-bolt fastened to the front axle and passing up through apertures in said brackets, its upper end being journaled in said connecting-bar, a standard seated in another aperture in said connecting-bar, a chain fastened to said standard and to said bottom plate, and means to actuate said standard to raise and lower said plate.

4. In a wagon, the combination with the body, of a hinged bottom plate, a standard mounted in an extension of said body, a chain connecting said standard and plate, a ratchet-wheel on said standard, a pawl adapted to engage said wheel to retain the plate in its raised position, and a brake, arranged on the other side of said wheel and connected to said pawl, adapted to check the drop of said plate.

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

JOSEPH B. MOWRY.

Witnesses:

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O. W. SUTTON.