No. 849,931. PATENTED APR. 9, 1907.

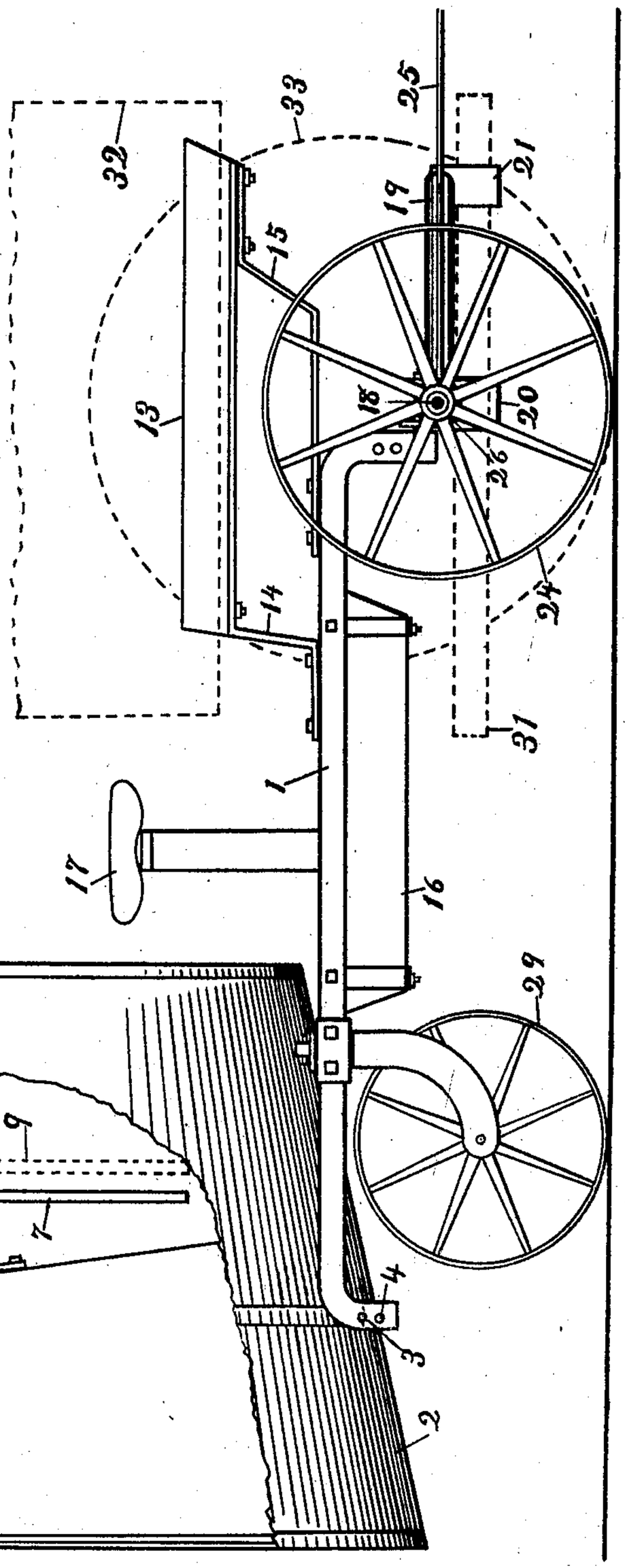
J. G. STEWART.

GRAIN SHOCKER.

APPLICATION FILED DEC. 26, 1905.

3 SHEETS—SHEET 1.

Fig. 1.



WITNESSES.

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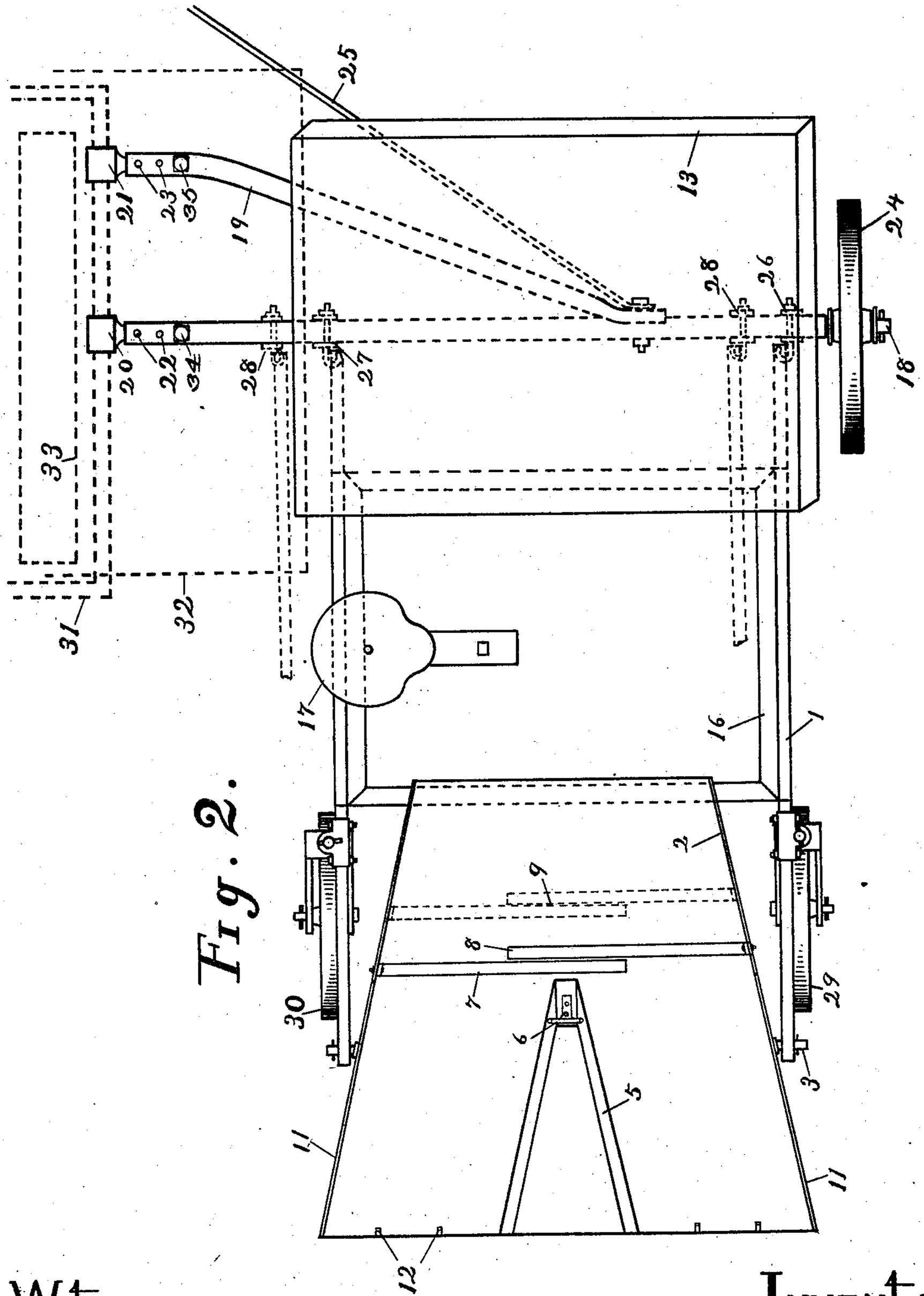
3 SHEETS—SHEET 2.

Fig. 2.



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3 SHEETS—SHEET 3.

Fig. 4.

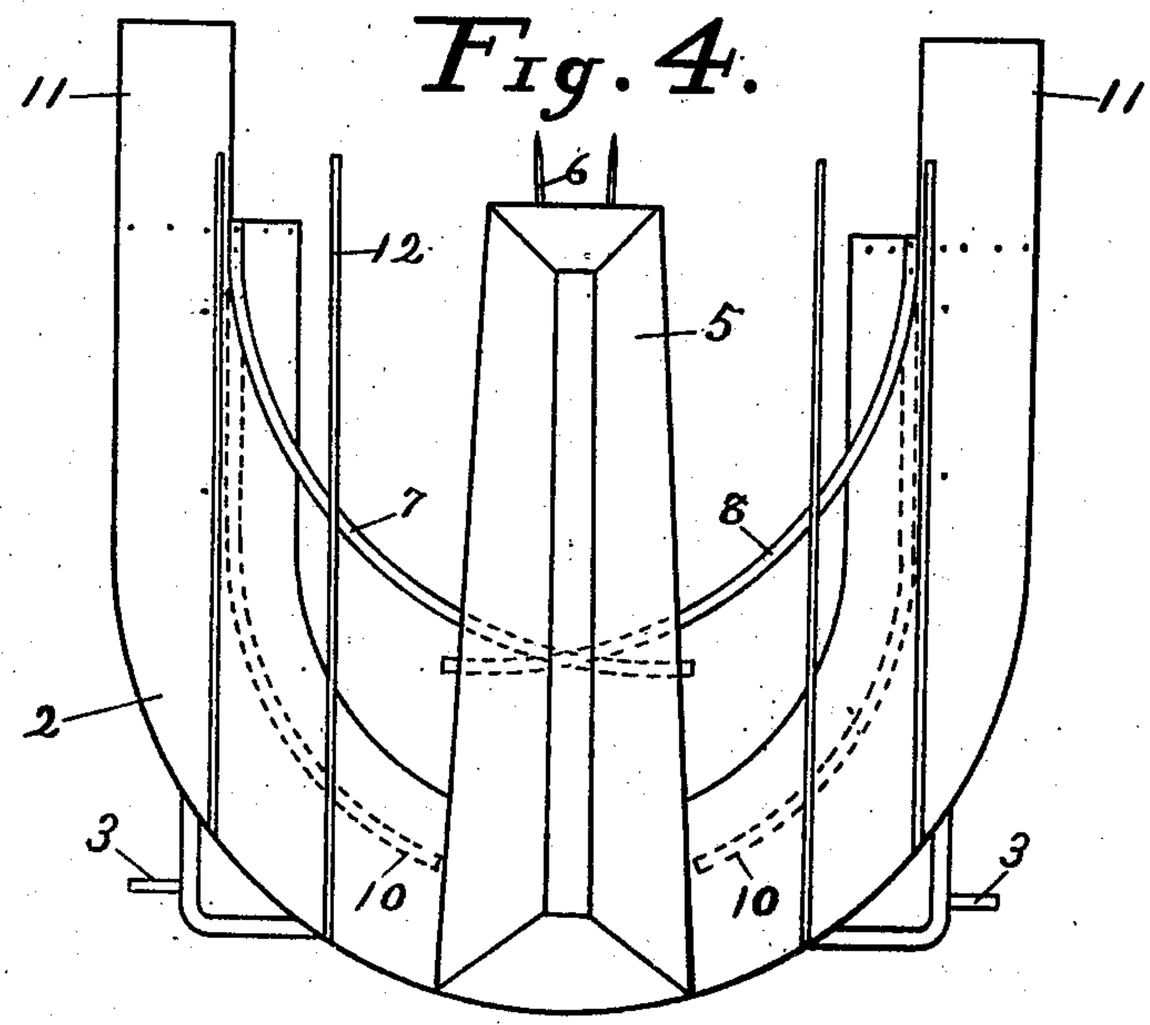
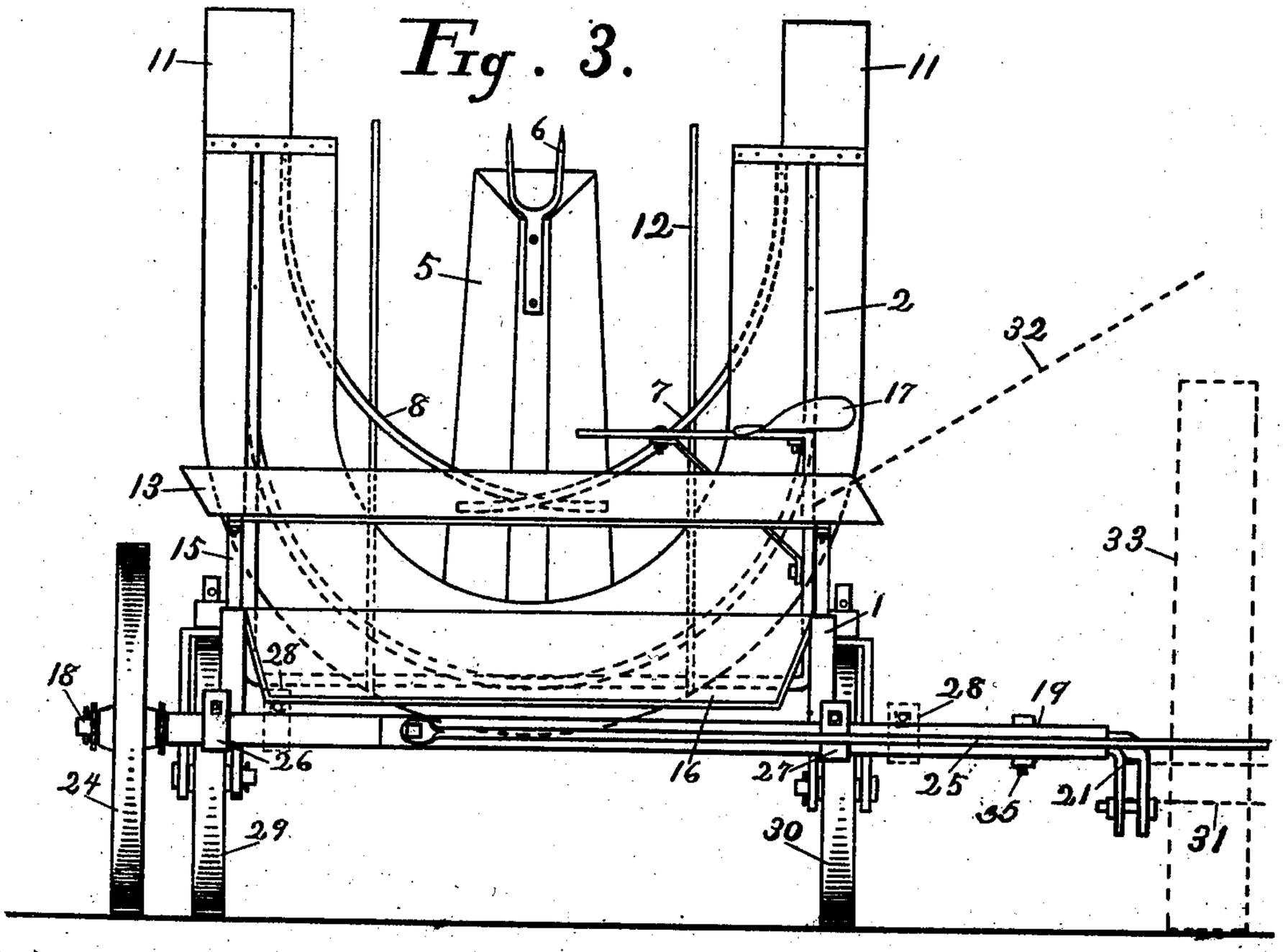


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN G. STEWART, OF MONMOUTH, ILLINOIS.

GRAIN-SHOCKER.

No. 849,931. Specification of Letters Patent. Patented April 9, 1907.

Application filed December 26, 1905. Serial No. 293,265.

To all whom it may concern:

Be it known that I, JOHN G. STEWART, a citizen of the United States, residing at Monmouth, in the county of Warren and State of Illinois, have invented new and useful Improvements in Grain-Shockers, of which the following is a specification.

This invention relates to certain new and useful improvements in grain-shockers, wherein the shocker is attached to the binder, the object in view being to provide a shocker which will more effectually set up the shocks of grain, particularly without the necessity of tying the shock or having to stop the binder, the novel construction and arrangement of the several parts being hereinafter more fully described and then specifically defined in the appended claims.

In the drawings and figures of reference marked thereon, which form a part of this specification, like figures indicate like parts throughout the several views.

Figure 1 is a side view with a portion of the receptacle represented as broken away to more clearly show a side view of the cone or divider in the receptacle. Fig. 2 is a top plan view. Fig. 3 is a front end view. Fig. 4 is a rear end view of the receptacle.

Reference now being had to the accompanying drawings by numerals, 1 represents the shocker-frame, to which other parts of the shocker are secured and attached, as hereinafter specified.

2 is the receptacle for forming the shock of grain and setting up the shock, the receptacle being pivoted to the rear ends of the side bars of the shocker-frame, as shown at 3, the receptacle being adapted to swing freely on the said pivots when put in operation to deposit the shock on the ground and is adjustable up or down, as shown at 4. The receptacle lies in a horizontal position while the shock is being formed, and when the shock is formed the person operating the shocker by taking hold of the front part of the receptacle and giving it a lift causes it to swing on the said pivots to a perpendicular position to set up the shock. Then when the receptacle is drawn away from the shock the person operating the shocker by taking hold of the receptacle and giving it a light pull causes it to swing on the said pivots and return to the horizontal position for receiving the next shock. 5 represents a divider placed in the receptacle, extending lengthwise from the rear end to about one-half the length of the receptacle, firmly secured to the bottom of the receptacle and forming a part of the receptacle, around which the bundles of grain are placed in forming the shock and which holds the butt of the shock well spread out when set up and leaves an open space through the shock, forming an air-chamber, permitting air to readily circulate through the shock, which is of special advantage in grain that is not fully ripe when cut, as is often the case, or if the shock should become wet with rain the shock will dry out much quicker and prevent molding of straw or grain, as it would be liable to do if packed close in the center, as is now done in other methods of shocking grain. The said divider is tapered in form, which permits it to be easily drawn out of the shock after the shock is set up and the shocker is drawn along away from the shock.

6 is a fork secured to the top of the front part of the divider on which the last bundle forming the shock is placed, the tines of the fork sticking into the bundle and holding it close in with the bundles adjacent thereto and causing the bundles to cling together while being set up, the fork drawing out with the divider.

7 and 8 are thin flat springs of steel attached to the inside of the receptacle at the top edge between the narrow front end of the receptacle and the divider which is in the receptacle. The springs 7 and 8 are shaped to conform to the shape of the receptacle and may be adjusted forward or back, as shown by the dotted lines at 9. The lower ends of the two springs normally stand some distance away from the bottom of the receptacle; but as the weight of the bundles of grain fall on the springs in forming the shock the springs are pressed down until they come in contact with the bottom of the receptacle, as shown by dotted lines at 10. Then when the receptacle is tipped to a perpendicular position in setting up the shock and is drawn away from the shock the two springs 7 and 8 continue to press against the shock until they return to their normal position and prevent the bundles of grain from falling over.

The rear part of the sides of the receptacle are extended up higher than the forward

part, as shown at 11. As the bottom of the shock is much wider than the top, the side extensions of the receptacle press against the sides of the shock and hold the bundles from falling over when the shock is set up.

12 represents fingers at the rear end of the receptacle, against which the bundles of grain are placed in forming the shock in the receptacle. The fingers are a guide to form a flat bottom to the shock of grain and steady the shock while it is being deposited.

13 is a flat shallow sheet-iron deck secured to the forward end of the shocker-frame with the braces 14 and 15 to receive the bundles of grain as they are discharged from the binder and is large enough to hold three or more bundles. The inner edge of the deck 13 extends under the edge of the binder. The forward edge and the outer edge of the deck 13 are turned up to form a pan-like receptacle, which prevents the bundles from falling off and which catches the loose heads of grain, which may be gathered up and placed in the shock and saved.

16 is a box secured in the center of the shocker-frame, between the receptacle 2 and the deck 13.

17 is a seat secured to the shocker-frame at the side next the binder for the person operating the shocker, who with a short-handled pitchfork picks up the bundles from the deck 13 and turning them over places the bundles in the receptacle with the butts turned back next to the fingers in the rear end of the receptacle and when the shock is formed tips the receptacle to a perpendicular position and sets up the shock.

If while moving the bundles of grain from the deck to the receptacle loose grain should drop, the box 16 catches and holds all such loose grain, so that in working the shocker much loose grain is saved which would otherwise be lost.

18 represents an axle with the brace 19, which are made of gas pipe or tubing and are attached to the binder-frame with the two clamps 20 and 21. The clamp 20 is attached to the axle with the bolt 34, and the clamp 21 is attached to the brace 19 with the bolt 35. The end of the clamps 20 and 21 are inserted in the ends of the tubing in such a manner that the axle may be adjusted close to the binder-frame or farther away to suit different makes of binders, as shown by bolt-holes at 22 and 23. The outer end of the axle is carried by the wheel 24.

25 is a brace-rod extending from the axle to the tongue of the binder.

26 and 27 are two adjustable clamps attached to the axle, to which the shocker-frame is coupled to draw the shocker forward over the ground and may be adjusted to any position on the axle to set the shocker close to or farther away from the binder, as shown by the dotted lines at 28.

The weight of the forward part of the shocker-frame 1 and deck 13 rests on the axle, while the greater portion of the weight of the rear part of the shocker-frame 1, the receptacle 2, and weight of the person operating the shocker is carried on the two caster-wheels 29 and 30, secured to the rear part of the shocker-frame.

The dotted lines at 32 represent the deck of the binder, where the bundles of grain are tied by the binder, and when discharged from the binder are deposited on the deck 13 of the grain-shocker.

The dotted lines at 33 represent the master-wheel of the binder.

31 represents the binder-frame.

I am aware that grain-shockers have been attached to binders for shocking grain and that grain-shockers have been made with some parts similar in appearance to parts of the shocker herein described; but I am not aware that any grain-shocker has been made, shown, or described the same as the invention herein shown and described. Therefor having thus described my invention I do not claim the invention broadly; but

What I do claim, and desire to secure by Letters Patent, is—

1. In a grain-shocker, the combination with the shocker-frame, of the receptacle attached to the rear part of the said frame, having a divider placed in the receptacle, extending from the rear end to the central part of the said receptacle and forming a part of the receptacle, a fork secured to the top and forward part of the said divider, adjustable springs in the said receptacle attached to the sides of the receptacle between the said divider and the front end of the receptacle.

2. In a grain-shocker, the combination with the shocker-frame, of a receptacle attached to the rear part of the said frame, having a divider placed in the receptacle and forming a part of the receptacle, a deck secured to the forward part of the said shocker-frame, with a box secured to the central part of the said shocker-frame, for the purpose of catching all loose grain that falls when the bundles of grain are being moved from the said deck to the said receptacle.

3. The combination of a binder-frame with a shocker, said shocker comprising a shocker-frame, clamps 20 and 21 attached to the said binder-frame, the adjustable axle attached to the said clamps with a wheel journaled to the outer end of the said axle, clamps 26 and 27 attached to the said axle and adjustable thereon, with the said shocker-frame coupled to the said clamps.

4. In a grain-shocker, the combination of a shocker-frame, a receptacle attached to the said frame, a divider placed in the said receptacle and forming a part thereof, with the fork secured to the top and front part of the

said divider, to engage the bundle of grain placed on top of the said divider and hold the bundle close in with the shock.

5. In a grain-shocker, the combination of a shocker-frame, a receptacle attached to the rear part of the said frame in a normally horizontal position to receive the bundles of grain, having a divider placed in the receptacle and forming a part thereof, with the two adjustable springs attached to the sides of the receptacle between the said divider and the front end of the receptacle, the lower ends of the said springs normally set some distance up from the bottom of the receptacle, bent to conform to the shape of the receptacle when pressed down with the bundles of grain.

6. The combination of a binder-frame with a shocker, said shocker comprising a shocker-frame, a receptacle attached to the rear part of the said shocker-frame, having a divider placed in the receptacle and forming a part of the receptacle, a deck secured to the forward part of the said shocker-frame, a box secured to the said shocker-frame between the said receptacle and the said deck, clamps attached to the said binder-frame with the adjustable axle attached to the said clamps, clamps 26 and 27 attached to the said axle and adjustable thereon, with the said shocker-frame coupled to the said adjustable clamps.

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

JOHN G. STEWART.

Witnesses:
F. C. WHITEHOUSE,
W. R. BURNHAM.