

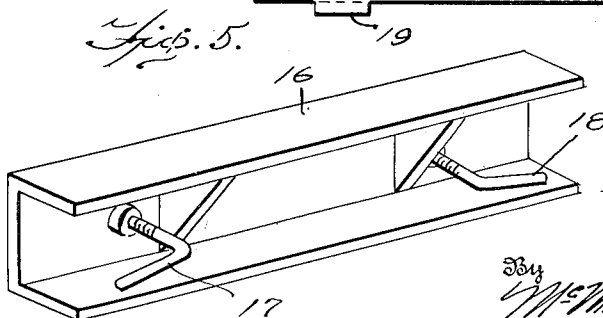
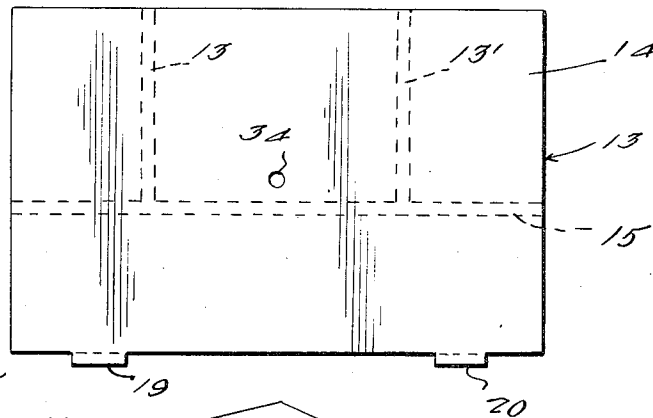
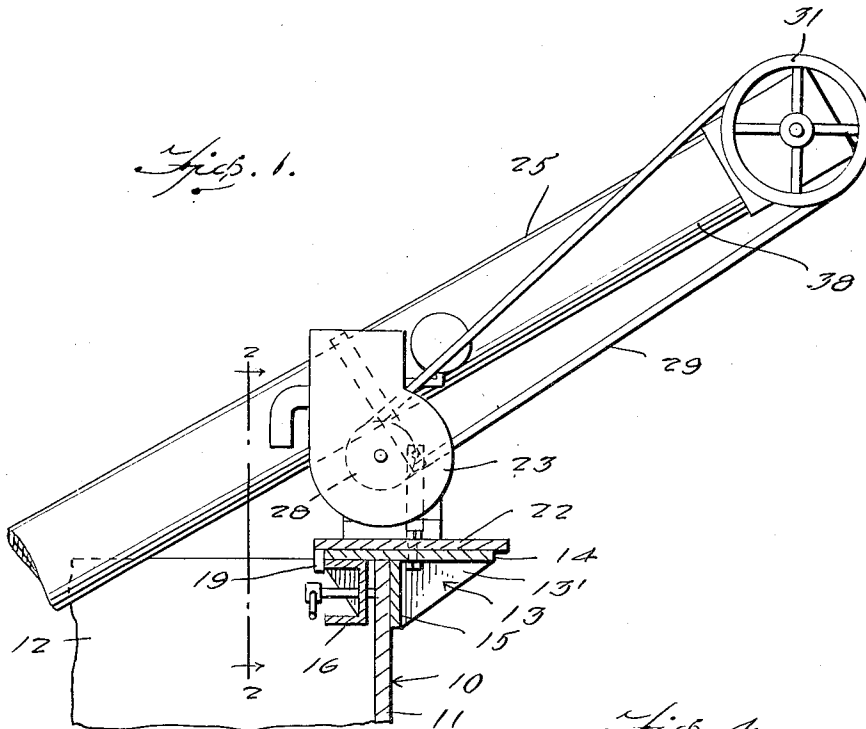
May 9, 1950

L. W. SABOE
PORTABLE CONVEYER

2,506,684

Filed Aug. 23, 1946

2 Sheets-Sheet 1



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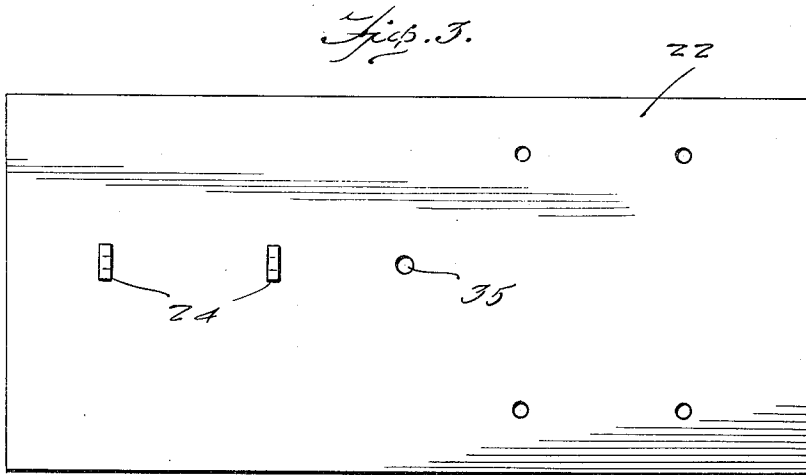
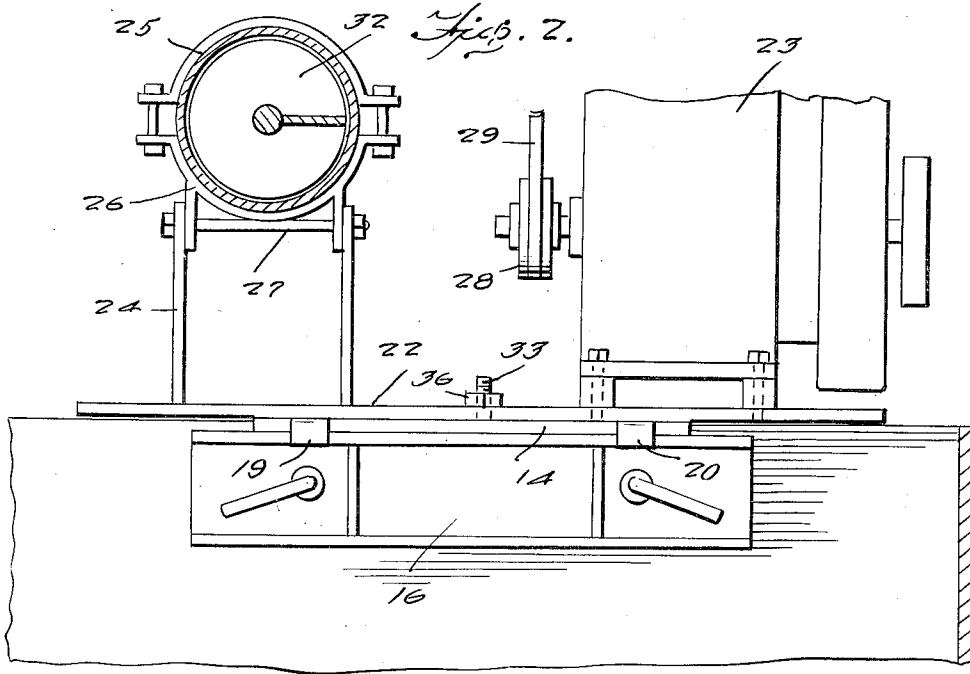
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UNITED STATES PATENT OFFICE

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PORTABLE CONVEYER

Lester W. Saboe, Carpenter, S. Dak.

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2 Claims. (Cl. 198-118)

1

This invention relates to portable conveyors and more particularly to a motor driven auger type of conveyor adapted to be clamped or connected to the top edge of a wagon to serve as a grain loader or unloader for the wagon.

It is an object of the present invention to provide a motor-driven grain loader device, which can be easily rotated or adjusted in a horizontal plane to change the direction to which the conveyor chute is projected, or to permit the same to be swung into the wagon to serve to unload the wagon.

It is another object of the invention to provide in a loader for wagons which is motor driven, an arrangement wherein tilting of the loader from one elevation to another makes no variation in the driving belt.

It is another object of the invention to provide a motor driven loader for wagons which can be expeditiously and quickly handled and adjusted by one man and in which operation it is only necessary that one bolt be removed to separate the loader and its motor from its mount, the same bolt serving as the pivot pin for the motor loader upon a platform to which it is connected.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description, taken in connection with the accompanying drawing, in which:

Figure 1 is a side elevational view of the conveyor and its motor adjusted to an unloading position upon a wagon support and with the chute projected into the interior of the wagon.

Figure 2 is a cross-sectional view taken through the chute and looking in side elevation upon the motor or engine used in driving the conveyor and upon the clamping plate utilized for securing the mount upon the end of the wagon, the view being taken along line 2-2 of Fig. 1 and looking in the direction of the arrows thereof.

Figure 3 is a plan view of the top platform on which the chute and engine are mounted and having a central hole adapted to receive the pivot bolt.

Figure 4 is a top plan view of the mount upon which the conveyor and engine platform is supported for rotatable adjustment.

Figure 5 is a perspective view of the clamping plate used for securing the mount upon the wagon edge.

Referring now to the drawing, 10 represents a wagon fragment having a rear or tail board 11 and side boards 12. Over the top edge of the rear board there is connected a mounting bracket 13 having a horizontal plate portion 14 super-

2

imposed upon a vertical plate portion 15 and secured to the latter. The bracket is placed on the top edge of the rear board 11 so that the vertical portion of the bracket lies flush against the rear face of the rear board and the horizontal portion rests on the top edge of the rear board 11. Braces 13' are disposed between the vertical and horizontal portions. To retain the mounting bracket in this position, there is provided a clamping member 16 of channel shape. The web portion of this member has two clamping screws 17 and 18 horizontally spaced from each other which are supported therein for rotation in a clockwise and counterclockwise direction for moving the clamping member 16 into and out of bearing engagement with the depending projections 19 and 20 on the side edge of the horizontal plate portion 14. Specifically, the clamping screws 17 and 18 are threaded into the web portion of the clamping member 16 so that as they are tightened they will force the horizontal portion 14 forwardly and the vertical portion against the rear face of the rear board. The upper part of the channel at the same time engaging with depending projections 19 and 20 on the forward edge of the horizontal portion 14.

Resting upon the horizontal plate portion 14 of the mounting bracket is a base or supporting plate 22 carrying the auger chute 25, said base 22 being mounted for swinging movement about a vertical axis. The plate 22 serves as a support for an engine 23 and a bracket 24 on which the auger chute 25 is pivotally connected by means of depending bracket portions 26 and a pivot bolt 27 extending through the bracket 24. The pivot bolt lies in alignment with the driving axis of the motor, so that the belt is not loosened or tightened by vertical adjustment of the grain chute. The engine 23 has a pulley 28 connected by a belt 29 to a drive wheel 31 connected with an auger 32 within the grain chute 25 to drive the same. As the grain chute and the engine is turned in a horizontal plane, the supporting base 22 is turned upon the horizontal portion 14 of the mounting bracket. A pivot pin or bolt 33 is extended upwardly from the opening 34 in the bracket horizontal portion 14 and through an opening 35 in the supporting plate 22 registering with the opening 34 of the mounting bracket. A nut 36 on the top of the supporting plate retains the pin 33 against axial displacement and when loosened permits relative turning movement of the supporting plate 22 with respect to the bracket 13.

By raising the chute out of the interior of the

3

wagon and rotating the supporting plate, the chute can be adjusted to a loading position whereby grain will be conveyed upwardly through the chute and deposited from its upper end 38 into the wagon. The nut 36 will then be tightened to retain the loader in its newly adjusted position. It will be apparent that this operation can be easily effected by one man.

Having now described my invention, what I claim is:

1. A means for supporting a grain conveyor chute on a wagon tail board comprising a mounting bracket arranged in embracing relation with respect to the top edge of said tail board and comprising a vertically disposed plate arranged in abutting relation to the outer face of said tail board, a horizontal plate portion having a projection depending from a side thereof superimposed upon said vertical plate and secured to the latter, the horizontal plate portion being supported on the top edge of said tail board with its projection positioned inwardly of and spaced from said tail board, a clamping member arranged in confronting relation with respect to the inner face of said tail board and having a side engageable with the depending projection on said horizontal plate portion, a horizontally disposed base plate carrying said chute and mounted on said horizontal plate portion for swinging movement about a vertical axis, and actuating means supported in said clamping member for rotation in a clockwise and counterclockwise direction for moving said clamping member into and out of bearing engagement with the depending projection on said horizontal plate portion.

2. A means for supporting a grain conveyor chute on a wagon tail board comprising a mount-

4

ing bracket arranged in embracing relation with respect to the top edge of said tail board and comprising a vertically disposed plate arranged in abutting relation to the outer face of said tail board, a horizontal plate portion having a projection depending from a side thereof superimposed upon said vertical plate and secured to the latter, the horizontal plate portion being supported on the top edge of said tail board with its depending projection positioned inwardly of and spaced from said tail board, a clamping member arranged in confronting relation with respect to the inner face of said tail board and having a side engageable with the depending projection on said horizontal plate portion, a horizontally disposed base plate carrying said chute and mounted on said horizontal plate portion for swinging movement about a vertical axis, and actuating means embodying a pair of horizontally disposed spaced clamping screws supported in said clamping member for rotation in a clockwise and counterclockwise direction for moving said clamping member into and out of bearing engagement with the depending projection on said horizontal plate portion.

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