

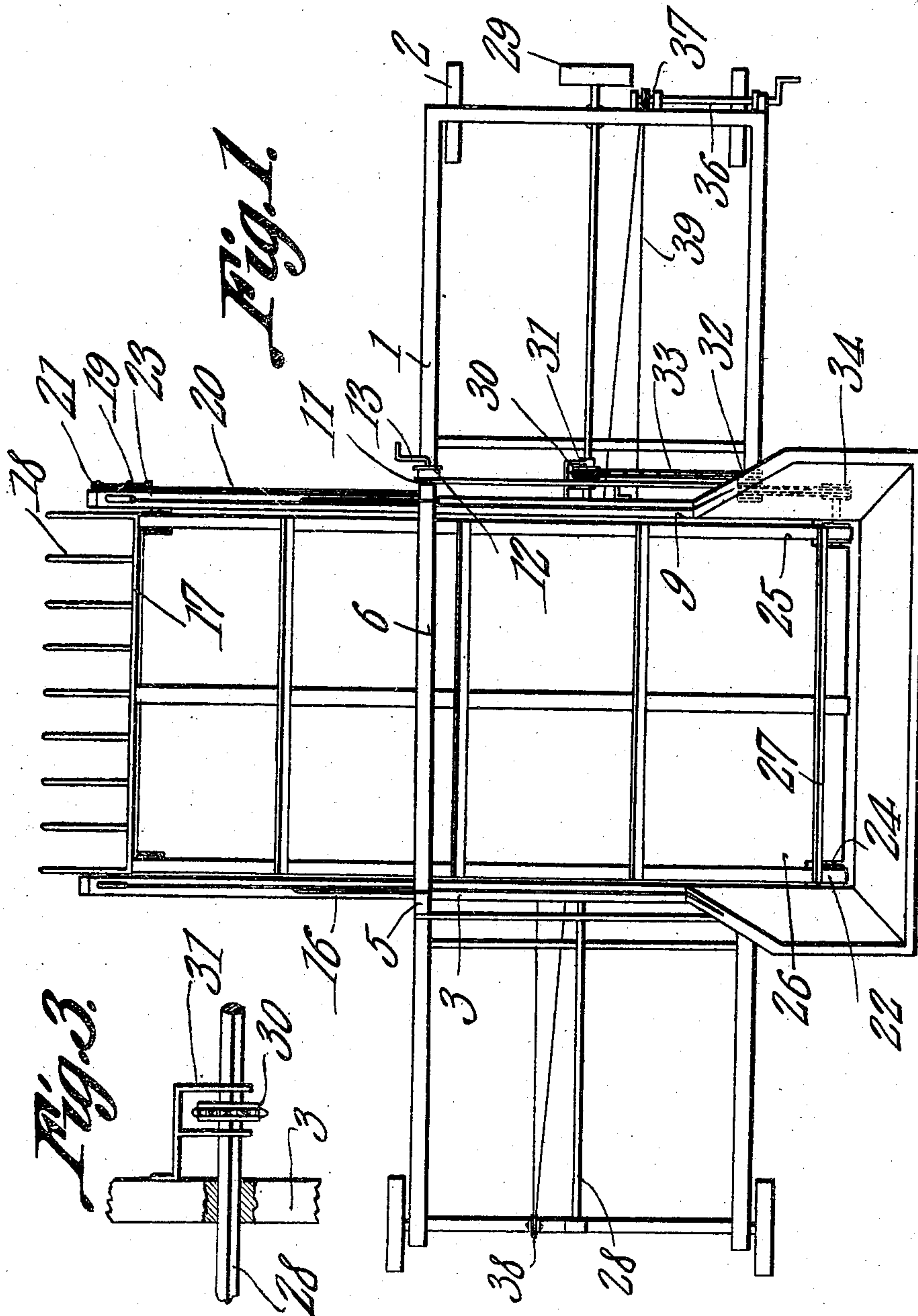
R. O. McBURNEY.  
STACKER.

APPLICATION FILED MAR. 18, 1910.

966,580.

Patented Aug. 9, 1910.

2 SHEETS—SHEET 1.



Witnesses

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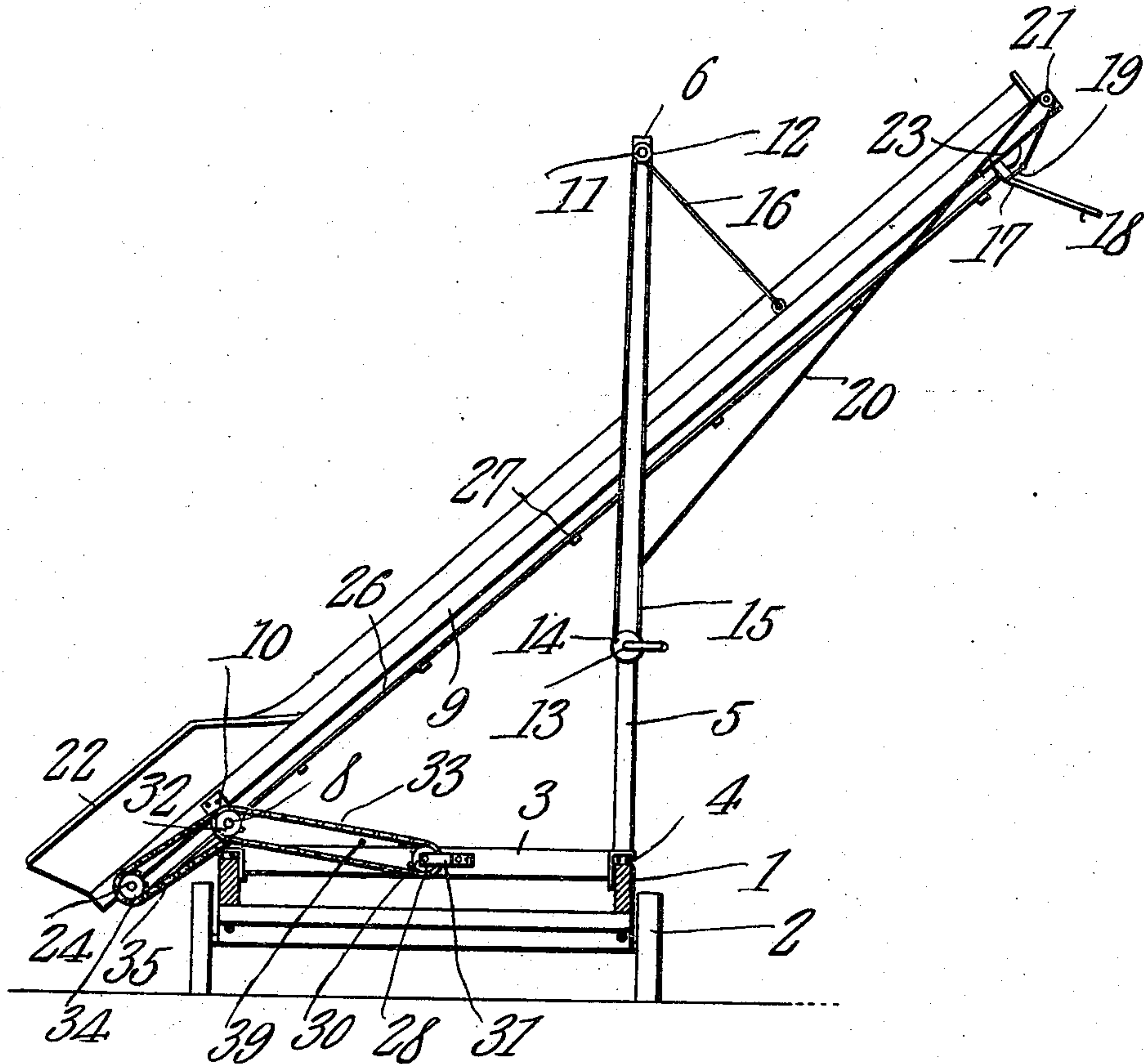


Fig. 2.

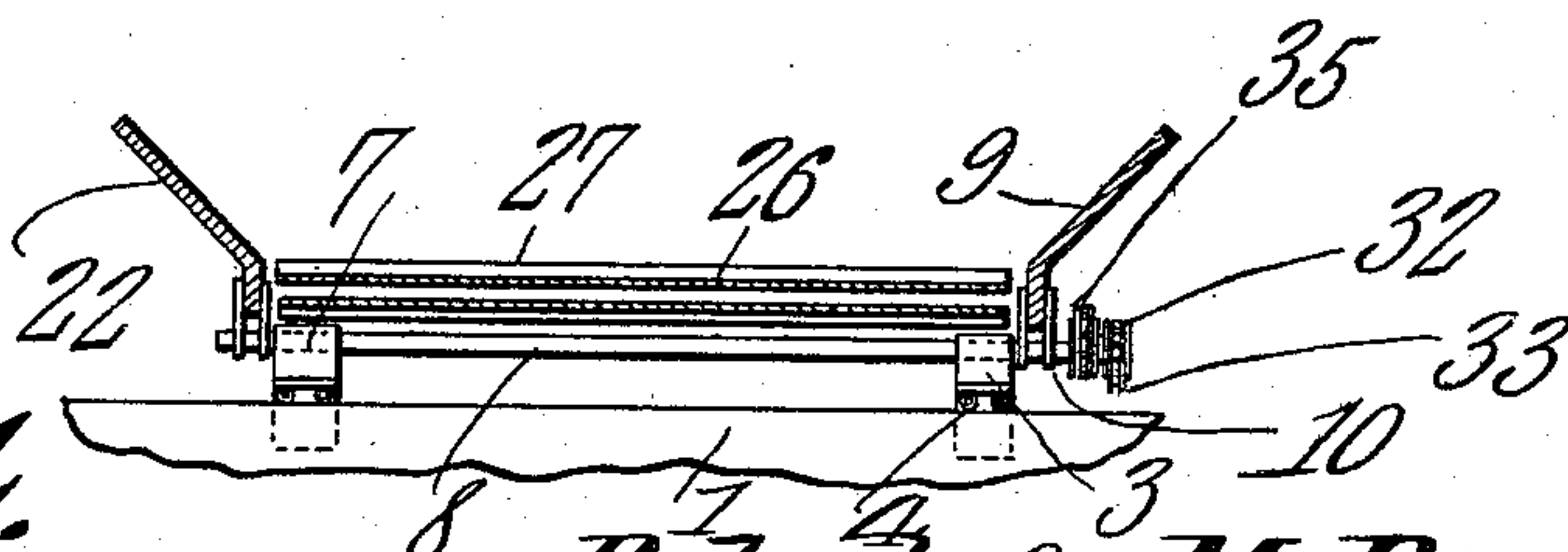


Fig. 4.

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# UNITED STATES PATENT OFFICE.

ROBERT O. MCBURNEY, OF PENALOSA, KANSAS.

STACKER.

966,580.

Specification of Letters Patent.

Patented Aug. 9, 1910.

Application filed March 18, 1910. Serial No. 550,172.

*To all whom it may concern:*

Be it known that I, ROBERT O. MCBURNEY, a citizen of the United States, residing at Penalosa, in the county of Kingman and State of Kansas, have invented a new and useful Stacker, of which the following is a specification.

This invention relates to a stacker and it consists in the novel construction and arrangement of its parts as hereinafter shown and described.

The object of the invention is to provide a stacker in the form of a wheel mounted truck having a superstructure slidably mounted thereon which in turn supports an elevator trunk having an endless conveyer belt mounted for movement along the frame. Means is mounted upon the frame of the truck for operating the said endless belt irrespective of the position of the superstructure along the frame of the truck. Also means is provided adapted to be operated manually for positioning the superstructure at any desired point along the frame of the truck. The elevator trunk is provided at its lower end with a receiving hopper and a wheel mounted barge of peculiar construction is arranged to cooperate with said hopper to deliver material to the same.

The stacker may be used to advantage for handling hay, alfalfa, straw or the like and during the formation of the accumulation of material it is possible to form a stack or a rick as desired.

In the accompanying drawings:—Figure 1 is a top plan view of the stacker. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a detail view illustrating a portion of the actuating shaft of the stacker with parts located thereon. Fig. 4 is a transverse sectional view of a portion of the stacker.

The stacker consists of a truck which includes a frame 1 mounted upon supporting wheels 2. The said truck is adapted to be moved at will to any point upon the surface of the ground. A superstructure 3 is mounted upon the frame 1 and is provided with friction rollers 4 which are adapted to travel upon the upper edges of the side beams of the said frame 1. The superstructure 3 includes vertically disposed parallel masts 5 which are located directly above one of the side beams of the frame 1 of the truck. The upper ends of the masts 5 are connected together by a cross beam 6.

Bearings 7 are mounted upon the side

edge of the superstructure 3 opposite the edge thereof upon which the masts 5 are mounted, and a shaft 8 is supported in said bearings 7. An elevator trunk 9 is provided with downwardly disposed lugs 10 which are journaled upon the shaft 8. The intermediate portion of the trunk 9 lies between the upper portions of the masts 5. A shaft 11 is journaled for rotation at the upper ends of the masts 5 and is provided at one end with a pulley 12. A crank shaft 13 is journaled to the side of one of the masts 5 and is provided with a pulley 14. An endless belt or cable 15 passes around the pulleys 12 and 14. Cables 16 are arranged to wind upon the end portions of the shaft 11 and the lower ends of the said cables 16 are attached to the sides of the upper portions of the trunk 9. Thus it will be seen that by rotating the shaft 13 that the chain or belt 15 will be moved in an orbit about the pulleys 12 and 14 and as the shaft 11 is rotated the cables 16 are wound thereon or unwound therefrom and thus means is provided for raising or lowering the upper portion of the trunk 9 upon the shaft 8 as an axis.

A shaft 17 is journaled in bearings provided at the upper end of the trunk 9 and a series of spaced fingers 18 are fixed to the said shaft 17. A laterally disposed lug 19 is also fixed to the shaft 17 and one end of a cable 20 is attached to the outer end of the lug 19 and the other end of the said cable 20 is attached to one of the masts 5. The intermediate portion of the cable 20 passes over a pulley 21 journaled for rotation at the side of the trunk 9. The inner end of the cable 20 is attached to the mast 5 at a point normally below that part of the said mast at which the trunk 9 crosses the same. Consequently when the delivery end of the trunk 9 is swung down the cable 20 is slackened and the shaft 17 is permitted to turn so that the teeth 18 may approach perpendicular positions. On the other hand when the delivery end of the trunk 9 is elevated the cable 20 is drawn taut and the shaft 17 is swung upon its axis so that the teeth 18 are drawn into positions approaching a horizontal.

The sides of the trunk 9 may be made of wood, canvas, or any other suitable light material, and a receiving hopper 22 is formed at the lower end of the said trunk 9. A shaft 23 is journaled for rotation at the



upper end of the trunk 9 and a shaft 24 is journaled for rotation at the lower end thereof. An endless conveyer is arranged to move about the shafts 23 and 24, said conveyer consisting of webs 25 which are connected together by a continuous canvas strip 26 upon which cross slats 27 are mounted. The elevator traverses the length of the trunk 9 and has its receiving end in the hopper 22 of the said trunk and its delivery end above the shaft 17 carrying the fingers 18.

A shaft 28 is journaled for rotation in the frame 1 and may be provided with a pulley wheel 29 whereby power may be applied to the same. A sprocket wheel 30 is slidably mounted upon the shaft 28 but is restrained to rotate in unison with the same. Said sprocket wheel 30 is held in position adjacent the side of the superstructure 3 by means of a bracket 31 or its equivalent. A double sprocket 32 is journaled for rotation upon the shaft 8 and a sprocket chain 33 passes around the sprocket wheel 30 and engages one of the set of teeth of the double sprocket wheel 32. A sprocket wheel 34 is fixed to the end of the shaft 24 and a sprocket chain 35 passes around the sprocket wheel 34 and one of the set of teeth of the bevel sprocket wheel 32. Thus it will be seen that as the shaft 28 is rotated the sprocket wheel 30 is simultaneously rotated and the chain 33 rotates the double sprocket wheel 32 which in turn through the connecting chain 35 rotates the sprocket wheel 34 and shaft 24. Thus means is provided for transmitting movement to the endless conveyer mounted in the trunk 9. Also it will be seen that by reason of the fact that the wheel 30 is slidably mounted upon the shaft 28 but is restrained to rotate in unison with the same that the superstructure may be moved along the frame 1 (by means hereinafter to be described) while the said shaft 28 and wheels 30 are rotated. Also by reason of the fact that the double sprocket wheel 32 is journaled on the axis of swinging movement of trunk 9 said trunk may be swung up or down at will while movement is being transmitted from the shaft 28 to the endless conveyer belt mounted in the said trunk 9.

A crank shaft 36 is journaled at one end of the frame 1 and is provided with a pulley 37. A pulley 38 is journaled at the opposite end of the frame 1 and a cable 39 is attached at one end to one side of the superstructure 3 from whence it passes around the pulley 37 thence back across the superstructure 3 to the pulley 38 around the same and back to the opposite side of the superstructure 3 to which it is attached. Therefore it will be seen that by rotating the crank shaft 36 the cable 39 will be moved longitudinally and inasmuch as the opposite ends of the said cable are attached to the opposite sides of the superstructure 3 the said superstructure

will be moved along the frame 1 of the truck. This adjustment of the superstructure 3 upon the frame 1 of the truck may be accomplished while the elevator trunk 9 is being raised or lowered and also while the endless conveyer is operating along the said trunk.

Thus it will be seen that a stacker is provided which may be readily transported from place to place and may be easily moved from point to point about a stack or rick or series of such accumulations of material. It will also be seen that many and various adjustments of the several parts may be accomplished while the stacker is at rest or the parts thereof are in operation and that by reason of such adjustable features much time may be saved by positioning the parts during the process of operation to properly deliver the material.

While it is preferable that the stacker should be operated by power as for instance, an engine, still it is to be understood that in lieu thereof any sweep mechanism or draft animal appliance may be connected with the stacker for operating the same in the manner as indicated.

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

1. A stacker comprising a wheel mounted truck, a superstructure mounted for movement along the truck, means for drawing the superstructure along the truck, said superstructure including vertically disposed parallel masts which are located over one of the side beams of the truck, an elevator trunk pivotally mounted at one side of the superstructure and lying between the upper portions of said masts at the other side of the superstructure, means for raising and lowering the free end portion of said trunk with relation to the masts, a conveyer belt mounted for movement along said trunk, a shaft journaled for rotation in the frame of the truck and passing transversely through the superstructure mounted thereon and means operatively connecting said shaft with the conveyer belt of the trunk.

2. A stacker comprising a wheel mounted truck, a superstructure mounted for movement along the truck, means for drawing the superstructure along the truck, said superstructure including masts vertically disposed over one of the side beams of the truck, a trunk pivotally mounted upon the superstructure at the opposite side thereof from said masts, the upper portion of the said trunk lying between the upper portions of the masts, means for raising and lowering the upper portion of the trunk with relation to the masts, a shaft journaled at the upper end of said trunk, spaced fingers carried by the shaft, a laterally disposed lug carried by the shaft, a cable fixed at one end to said



lug and at its other end to one of the masts, a pulley located at the side of the trunk and over which the intermediate portion of said cable passes, an elevator belt mounted for orbital movement along the trunk and having its delivery end disposed above the shaft at the upper end of the trunk, a shaft journaled for rotation in the truck and passing transversely through the superstructure located thereon, and means for transmitting movement from the last said shaft to the elevator belt located in the trunk.

3. A stacker comprising a wheel mounted upon the truck, a superstructure slidably mounted upon the truck, means for drawing the superstructure along the truck, said superstructure including masts vertically disposed over one side beam of the truck, a shaft located at the opposite side of the superstructure from that side at which the masts are located, a trunk pivoted at its lower end upon said shaft and lying at each opposite end portion between the upper portions of each of the said masts, means for raising and lowering the upper portion of the trunk

with relation to the masts, an endless elevator belt mounted for orbital movement along the trunk, a shaft journaled in the truck and passing transversely through the superstructure, a wheel slidably mounted upon said shaft but restrained to rotate in unison with the same and adapted to move along the shaft in unison with the superstructure, a pinion journaled for rotation upon the axis of the pivotal support of the trunk, means for transmitting rotary movement from the shaft journaled in the truck to the pinion journaled upon the axis of the trunk and means for transmitting rotary movement from the pinion journaled for rotation upon the axis of the trunk to the endless conveyer belt.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ROBERT O. McBURNEY.

Witnesses:

MAHLON SIMPSON,  
B. A. WELCH.