No. 799,625. PATENTED SEPT. 19, 1905.

J. A. BERTHELOT.

MACHINE FOR GATHERING AND LOADING CROPS.

APPLICATION FILED SEPT. 14, 1904.

2 SHEETS—SHEET 1.

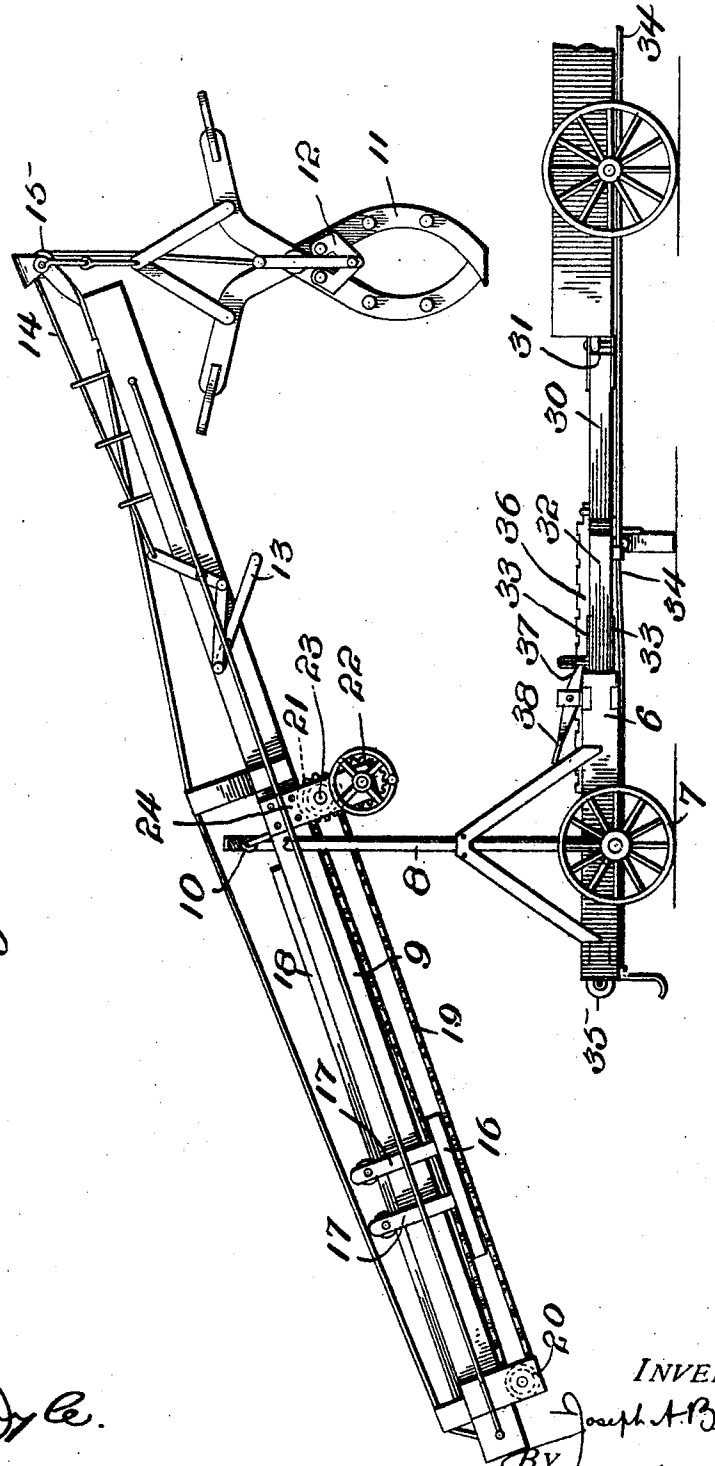


Fig. 1.

WITNESSES:

INVENTOR

Joseph A. Berthelot

BY

Thos. B. Stevens & Co

Attorneys

ANDREW. B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

No. 799,625. PATENTED SEPT. 19, 1905.

J. A. BERTHELOT.

MACHINE FOR GATHERING AND LOADING CROPS.

APPLICATION FILED SEPT. 14, 1904.

2 SHEETS—SHEET 2.

Fig. 2.

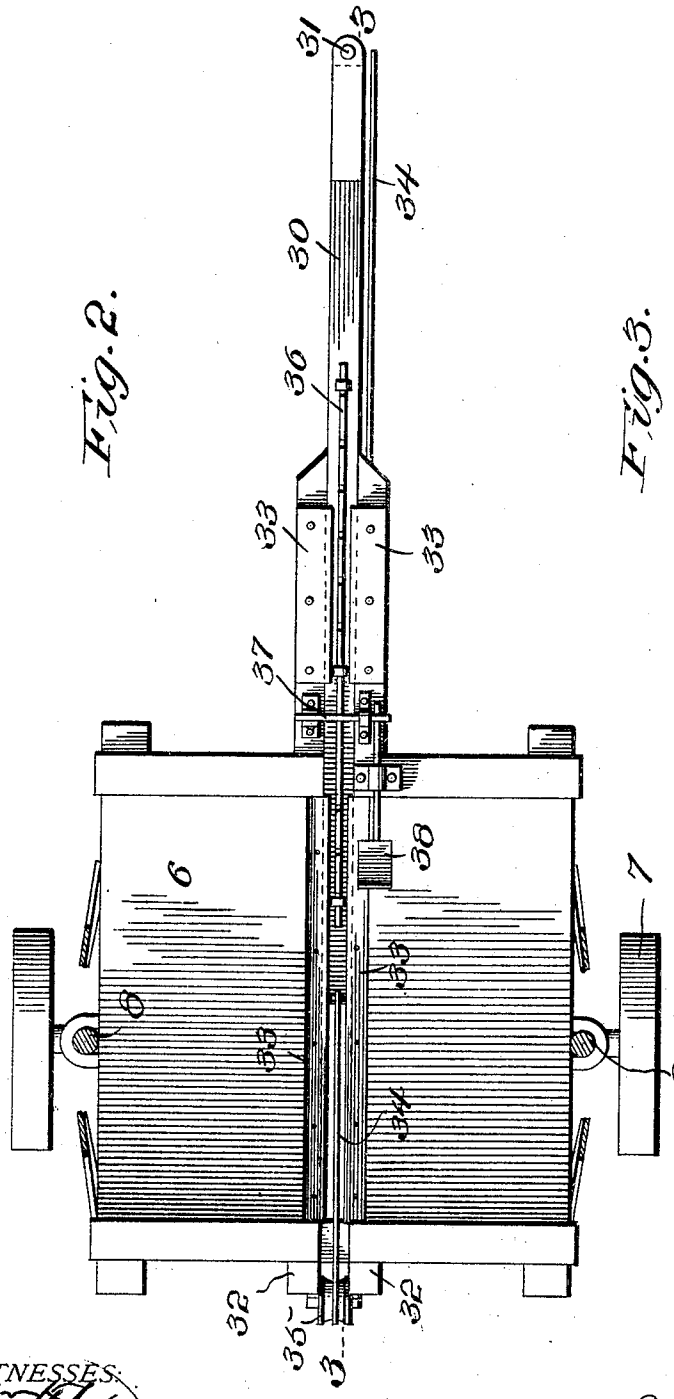
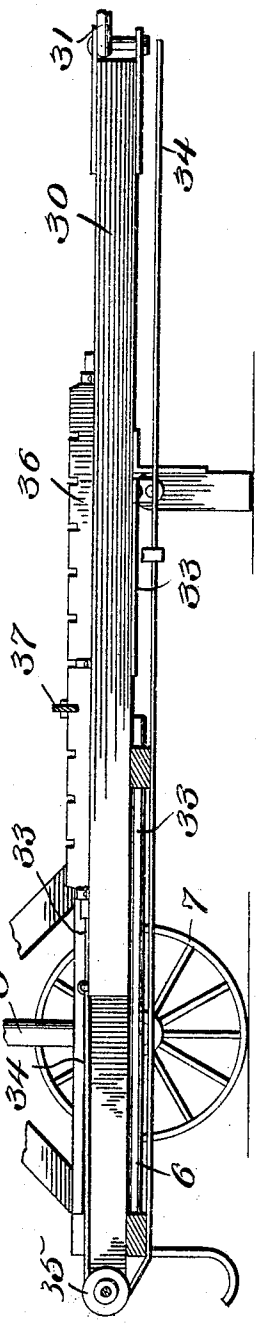


Fig. 3.



WITNESSES:

Wm. H. Kyle.

Geo. E. Tew

INVENTOR

Joseph A. Berthelot

BY

Milo B. Stevens & Co

Attorneys

ANDREW B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOSEPH A. BERTHELOT, OF HOHEN SOLMS, LOUISIANA.

MACHINE FOR GATHERING AND LOADING CROPS.

No. 799,625. Specification of Letters Patent. Patented Sept. 19, 1905.

Application filed September 14, 1904. Serial No. 224,414.

To all whom it may concern:

Be it known that I, JOSEPH A. BERTHELOT, a citizen of the United States, residing at Hohen Solms, in the parish of Ascension and State of Louisiana, have invented new and useful Improvements in Machines for Gathering and Loading Crops, of which the following is a specification.

This invention is a machine for gathering and loading crops, particularly sugar-cane, and it is intended to accompany a cart in which the sugar-cane is to be loaded and to gather and load the cut cane into the cart. It will be found particularly useful on sugar-plantations of sufficient size to warrant the use of a machine to supersede hand-loading.

Broadly speaking, the device comprises a truck adapted to be attached to the hind end of the cart or wagon which is to haul the cane and a crane or swinging boom carried on the truck and having at one end a grapple constructed to gather a bundle of cane and hoist the same into the wagon. The boom has thereon a traveling counterweight which may be pulled to and fro along the boom to raise and lower the grapple.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation thereof as applied to a farm-wagon. Fig. 2 is a plan of the truck, showing particularly the extensible tongue whereby the truck may be drawn closer to or farther from the wagon for the purpose of loading at front, back, or middle of the latter. Fig. 3 is a detail in section on the line 3 3 of Fig. 2.

Referring specifically to the drawings, the supporting-truck for the crane is indicated at 6, mounted upon wheels 7. This truck carries an arch 8, from the middle of which the boom 9 is hung by swiveling eyebolt at 10.

The grapple is indicated at 11, slung from the front end of the boom and provided with a trip 12, operated by a lever 13, which is in convenient reach of a man standing on the truck and which is connected to the trip by a cable 14, passing over a pulley 15 on the front end of the boom.

At 16 a counterweight is indicated, in practice weighing four or five hundred pounds. This is carried by hangers 17, which travel along the rear half or part of the boom upon a track 18 thereon. The weight may be shifted toward or from the rear end of the boom by means of a link belt 19, which extends around sprockets 20 and 21 at, respectively, the rear end and the middle of the boom. The belt is operated and the counterweight moved by a crank-wheel 22, the shaft of which carries a gear in mesh with a gear on the shaft 23 of the sprocket-wheel 21, the whole gear being carried by brackets 24, depending from the beam. The purpose and effect of this construction is that as the crank-wheel 22 is turned one way or the other by a workman on the truck the counterweight is pulled to and fro along the boom. When it is at or near the rear end, its weight is sufficient to depress that end and to lift the grapple and the bundle of cane, and the boom may then be swung to bring the grapple over the wagon, into which the bundle is then dumped by a pull on the lever 13, which trips the grapple. The counterweight is then drawn toward the middle of the boom, and the excess of weight at the front end of the boom depresses the same in readiness to take another bundle.

It is desirable that means be provided to vary the distance of the truck from the wagon, so that the load of cane may be dropped at either the front or rear of the wagon. This is effected by the means now to be described.

The tongue 30 of the truck is connected at its front end, as by link and pin 31, to the rear end of the wagon or cart. This tongue 30 is extensible—that is, it may be pulled in or out—being slidable lengthwise between two heavy beams 32 on each side thereof and confined in place by metal plates 33. To the rear end of the tongue is connected a rope or wire cable 34, which extends thence around a pulley 35 at the rear end of the truck and thence under the platform of the truck and under the wagon and out beyond the front of the latter, where it is to be connected to a team or draft-animal in front of the wagon-team. On the top or upper side of the tongue 30 is a notched rib or fin 36, the notches of which are adapted to receive a latch 37, which is operated by a treadle 38.

If now it be desired to draw the truck up close to the rear end of the wagon, so as to load, say, the front end of the wagon, the rope 34 is pulled, the latch 37 being first lifted, and the effect is to slide the tongue back, or, in other words, to draw the truck up close to the wagon. If, on the other hand, it be desired to let the truck go off at a distance from the wagon, the rope 34 is slacked, and, the wagon then advancing, the tongue is pulled out to the required extent, at which point the latch 37, being dropped, falls into one of the

notches of the fin 36 and holds the parts. The effect is to insure a comparatively rigid tongue whether the truck be at small or great distance from the wagon. Such a tongue is essential, because the truck, being mounted on two wheels only, needs such a support to prevent tipping.

The device may be operated by one man and do the work of several. It will be found particularly useful for planters of sugar-cane in the work of gathering their crops preparatory to hauling the same to the press. Draft-animals in addition to those ordinarily connected to the wagon are unnecessary.

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

1. In a loading apparatus, the combination with a truck constructed to be attached to and drawn by the wagon being loaded, and a crane carried by the truck, of means to vary the distance of the truck from the wagon, while in operation.

2. In a loading apparatus, the combination with a wagon to be loaded, of a truck having an extensible tongue coupled thereto, means to extend or retract the tongue, and a crane carried by the truck.

3. In a loading apparatus, the combination with the wagon to be loaded, of a truck having a tongue slidable lengthwise thereon and coupled to the wagon, a rope connected to the rear end of the tongue and extending thence around the rear of the truck and forwardly thereunder to a draft-animal, and a crane carried by the truck and arranged to load the wagon.

4. The combination with a truck, of an arch thereon, a swinging boom suspended from the arch, a grapple at the front end of the boom, and a traveling counterweight movable along the rear part of the boom, to raise or lower the same.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH A. BERTHELOT.

Witnesses:
L. D. BAHIN,
M. J. BAHIN.