J. LASS.

LOADING APPARATUS.

APPLICATION FILED MAY 26, 1913.

1,097,806.

Patented May 26, 1914.

2 SHEETS—SHEET 1.

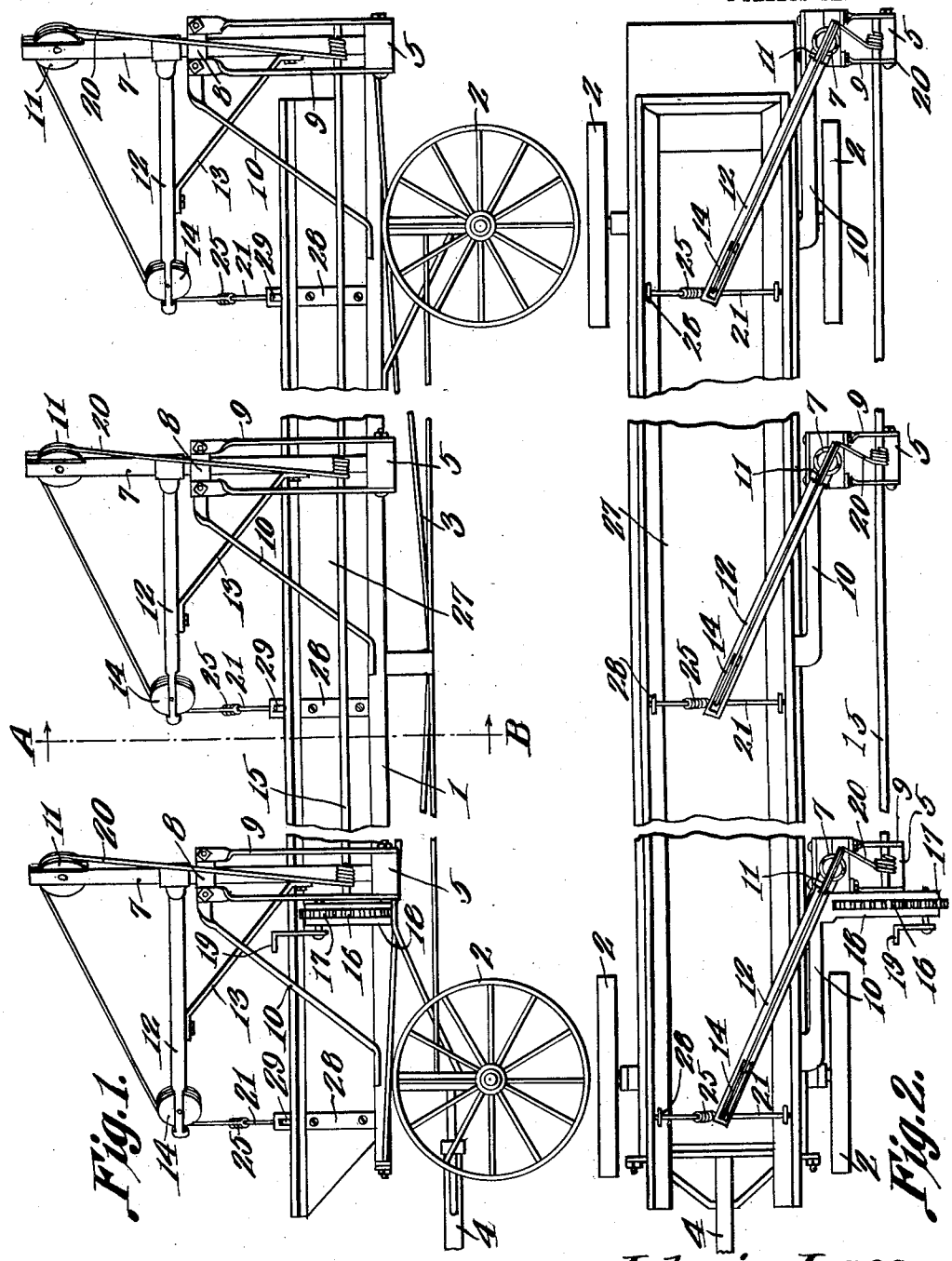


Fig. 1.

Fig. 2.

Witnesses

J. P. Toomey

S. Willson.

Johnie Lass.

Inventor

by C. A. Snow & Co.

Attorneys

J. LASS.

LOADING APPARATUS.

APPLICATION FILED MAY 26, 1913.

1,097,806.

Patented May 26, 1914.

2 SHEETS—SHEET 2.

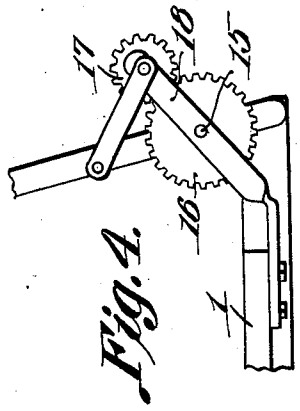


Fig. 4.

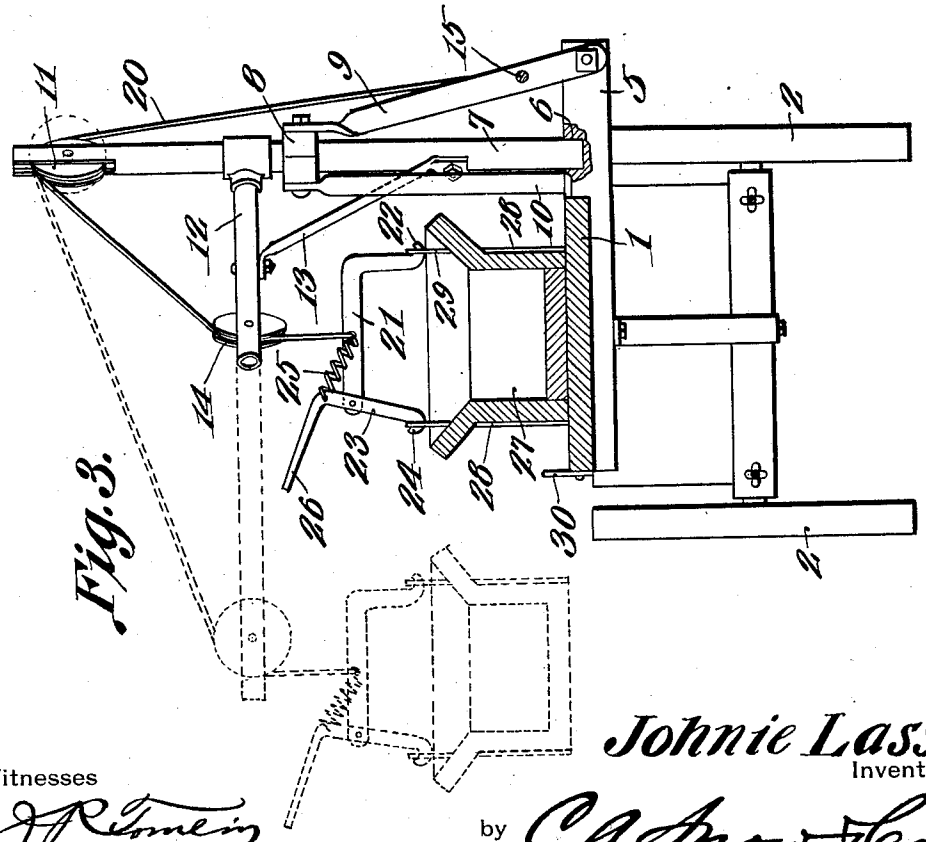


Fig. 3.

Witnesses

J. R. Tonein

J. Willard.

Johnie Lass,
Inventor

by C. A. Snow & Co.
Attorneys

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHNIE LASS, OF PATON, IOWA.

LOADING APPARATUS.

1,097,806. Specification of Letters Patent. Patented May 26, 1914.

Application filed May 26, 1913. Serial No. 769,934.

To all whom it may concern:

Be it known that I, JOHNIE LASS, a citizen of the United States, residing at Paton, in the county of Greene and State of Iowa, have invented a new and useful Loading Apparatus, of which the following is a specification.

This invention relates to loading and conveying apparatus particularly designed for use in collecting and conveying ears of corn.

One of the objects of the invention is to provide a vehicle having combined therewith a series of elevating devices adapted to operate in unison for the purpose of lifting an elongated receptacle and seating it upon the vehicle so that said receptacle can be conveyed from place to place.

Another object is to provide mechanism of this character which is simple, durable and efficient and which can be operated readily and quickly.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings the preferred form of this invention has been shown.

In said drawings:—Figure 1 is a side elevation of the machine, parts being broken away. Fig. 2 is a plan view thereof, parts being broken away and the receptacle being shown in position upon the vehicle. Fig. 3 is an enlarged section on line A—B Fig. 1, the receptacle being shown in position upon the platform of the vehicle and said receptacle being shown, by dotted lines, suspended beyond one side of the vehicle. Fig. 4 is an enlarged detail view of the mechanism employed for actuating the winding shaft.

Referring to the figures by characters of reference, 1 designates a platform supported by wheels 2, the said platform being of considerable length. In practice it has been found desirable to make the same between thirty and thirtyfive feet long and, obviously, a platform of such length requires some bracing means, such as the truss 3 shown in Fig. 1. This vehicle can be drawn in any desired manner, the structure illustrated being provided with a tongue 4 extending from the front axle and to which draft animals or a suitable tractor may be connected. Laterally extending beams 5 are connected to the platform and each of these beams has a socket 6 adapted to receive the lower end of a revoluble post 7, said post being journaled within a bearing block 8 supported by standards 9 extending upwardly from the outer end of the beam 5 and also held in place by a brace 10 secured to the platform 1. Any desired number of these posts 7 can be employed and in the structure shown three of them are used, one near each end of the platform and one adjacent the center thereof. A sheave 11 is journaled in the upper end of each post 7 and an arm 12 extends radially from each post at a point below the sheave and is adapted to rotate with the post. A brace 13 connects each arm 12 with the post and journaled within the outer end portion of each arm 12 is a sheave 14. The standards 9 constitute supports for a shaft 15 which is parallel with the platform 1. A gear 16 is secured to one end of this shaft and meshes with a smaller gear 17 journaled between arms 18 extending upwardly and laterally from the platform 1. The gear 17 is adapted to be rotated in any suitable manner, as by means of a crank arm 19.

Secured to the shaft 15 between the standards 9 of each pair is a chain, cable, or other flexible element 20 adapted to be wound upon the shaft. This flexible element extends upwardly over the sheave 11 upon the adjacent post 7 thence downwardly over the adjacent sheave 14, the end of the flexible element 20 being secured to one member 21 of a coupler. This member is L-shaped and has a hooked jaw 22 at one end while its other end is pivotally engaged by the other member 23 of the coupler. This member is likewise L-shaped and has a hooked jaw 24, the jaws 22 and 24 being extended in opposite directions. The connection 20 is secured to member 21 at a point between the ends thereof and a spring 25 is connected to the two members 21 and 23 and serves to hold the jaws 22 and 24 normally shifted away from each other. One end portion of the member 23 constitutes a releasing arm 26 which, when pushed downwardly, tends to elongate spring 25 and to shift 24 toward the jaw 22.

The mechanism hereinbefore described is designed to be used in connection with a receptacle 27 in the form of an elongated trough, this receptacle being provided near its ends and adjacent its center with straps 28 having eyes at their upper ends, as shown at 29, for receiving the jaws 22 and 24.

The trough-like receptacle 27 is adapted to rest upon the ground and, after being filled, can be elevated onto the platform 1 by means of mechanism provided for that purpose. In order to elevate the body 27, the vehicle is brought to a position close to one side thereof and the shaft 15 is then rotated so as to unwind the connections 20. Arms 12 are swung laterally so that the couplers will overhang the receptacle 27 and, obviously, these couplers will be lowered when connections 20 are paid out so that by swinging the member 23 relative to member 21, the jaws 22 and 24 can be inserted into the eyes 29, as shown in Fig. 3. After the couplers have thus been attached to the eyes 29, shaft 15 is rotated so as to wind the connections 20 thereupon, whereupon the couplers 21 and the receptacle will be raised to the position indicated by dotted lines in Fig. 3. The arms 12 are then swung laterally so as to cause the receptacle 27 to move inwardly toward the posts 7 and into position above the platform 1 whereupon the connections 20 are again paid out so as to lower the receptacle onto the platform. If desired, retaining ears 30 may be secured to one side of the platform so as to prevent the receptacle 27 from becoming displaced laterally relative to the platform. When it is desired to lower the receptacle from the vehicle, the foregoing operation is reversed.

What is claimed is:—

The combination with a vehicle including a platform and sills extending laterally beyond one side of the platform adjacent the ends thereof and at an intermediate point, of an upstanding post mounted for rotation upon the laterally extending portion of each sill, an arm radiating from each post, a bearing member engaged by each post and located between the ends of the post, a pair of braces connecting each bearing member to the sill thereunder, said sill extending between the braces, a shaft journaled in the braces, flexible elements supported by the posts and arms and secured to the shaft at points between the braces of each pair, respectively, and means for rotating the shaft to wind said elements thereon, the braces constituting means for confining the wound portions of the flexible elements, a receptacle, and coupling devices carried by said flexible elements and detachably engaging the receptacle.

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

JOHNIE LASS.

Witnesses:
D. A. PATERSON,
LEWIS S. CARL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."