(No Model.)

G. W. BENNETT.

CANE LOADING APPARATUS.

No. 506,967. Patented Oct. 17, 1893.

Fig 1

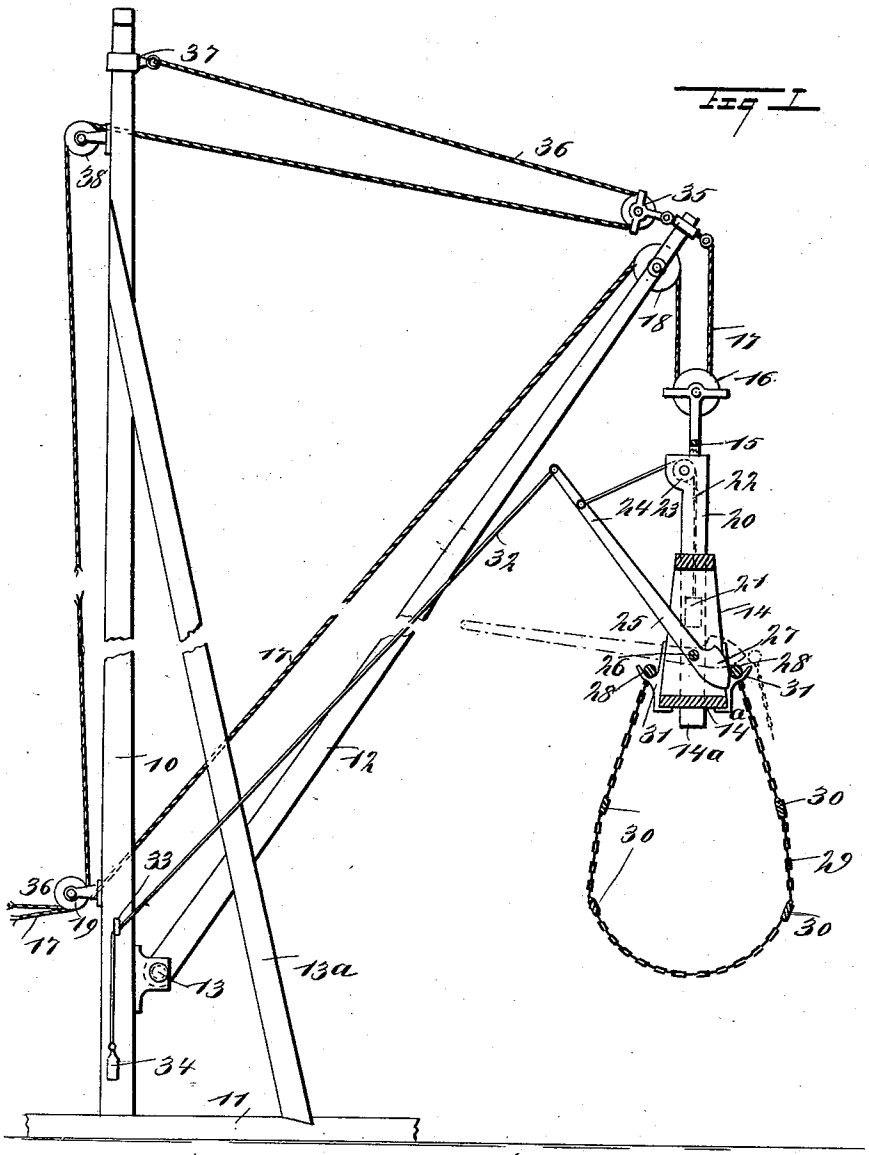


Fig 3

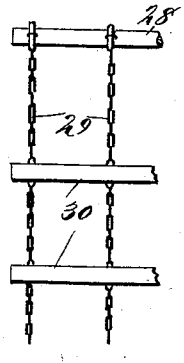
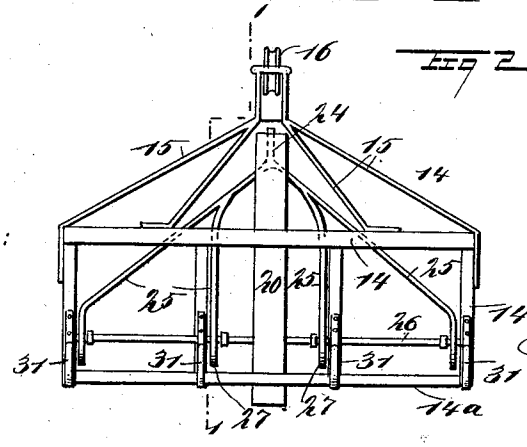


Fig 2



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GEORGE W. BENNETT, OF BENNETTSVILLE, LOUISIANA, ASSIGNOR TO HIMSELF AND J. C. KLOCK, OF SAME PLACE.

CANE-LOADING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 506,967, dated October 17, 1893.

Application filed July 14, 1893. Serial No. 480,475. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. BENNETT, of Bennettsville, in the parish of Rapides and State of Louisiana, have invented a new and Improved Cane-Loading Apparatus, of which the following is a full, clear, and exact description.

My invention relates to improvements in devices for loading cane into cars; and the object of my invention is to produce an extremely simple, inexpensive, strong and easily operated apparatus by means of which a quantity of cane, sufficient to fill an ordinary cart, may be easily lifted and quickly dumped into the cars so as to lie straight therein in the same way that it would lie if packed in by hand.

To these ends my invention consists of certain features of construction and combinations of parts, as will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a broken side elevation, partly in section on the line 1—1 in Fig. 2, of the apparatus embodying my invention. Fig. 2 is a detail side elevation of the movable dumping head or frame which carries the chains which support the cane; and Fig. 3 is a broken plan view of the outstretched chains and connecting ribs which support the cane and which serve as a sort of basket to enable it to be raised and dumped.

The apparatus is provided with a suitable derrick, comprising a mast 10 mounted on a suitable base 11, the ordinary swinging boom 12, which is pivoted to the mast, as shown at 13, and braces 13^a for the mast. Suspended from the free end of the boom is the dumping head or frame 14 which has a suitable base sill 14^a and which is also provided with stiffening braces 15 and has at the top the pulley 16 which lies on the suspending and hoisting rope 17, this being secured to the free end of the boom and passing beneath the pulley 16, thence over a pulley 18 near the free end of the boom and thence downward through the mast 10 and over a guide pulley 19. Any suitable power may be applied to the cable so as to cause the pulley 16 and the dumping head or frame carried thereby to be raised or lowered.

The dumping head or frame is provided with a vertical weight box 20, in which slides the weight 21, and this is secured to a cable 22 which runs over a guide pulley 23 in the upper portion of the weight box and extends outward and is secured to the tripping lever 24, the weight being sufficiently heavy to hold the free end of the lever 24 in a raised position, as shown in Fig. 1, and the lever has several branches 25 extending downward through the frame 14, said arms being pivoted at 26 in the frame, and each branch of the lever terminates at its lower end in a curved head 27 which is adapted to engage one of the bars 28 of the cane supporting chains or baskets so as to throw the said bar out of its supporting hooks and thus dump the load in the basket, as described below. These bars 28 are arranged at the ends of the chains 29, which, with their connecting cross ribs 30, form the basket in which the load of cane is carried. The bars 28 are loosely secured to the chains so that they may roll easily, as this enables them to be more easily forced from the hooks 31 which are secured to opposite sides of the frame or head 14 and in which the bars 28 lie. The free end, that is the longer end of the tripping lever 24, is connected to a cord 32, and this cord runs downward through a guide eye 33 on the mast 10 and terminates in a weight 34 which is sufficient to take up the slack of the cord. It will be seen that by pulling downward on the cord, the upper end of the lever 24 is pulled downward and the curved heads 27 of the lever thrown upward and outward so as to force one of the bars 28 from the hooks 31, thus permitting the chains 29 to straighten out. The boom is adjusted by means of a cable 36, which is secured to the upper end of the mast 10, as shown at 37, passes around the pulley 35 on the free end of the boom, thence back through the mast over a pulley 38 thereon, and thence downward around the pulley 19, where it may connect with any suitable source of power.

The device is used as follows: The basket comprising the chains 29, ribs 30, and bars 28

is placed in the empty wagon or cart bed, and the cane is loaded upon it. The loaded wagon or cart is then driven beneath the dumping head or frame 14, which can be adjusted by the cable 36 which is lowered, and the bars 28 are hooked upon the hooks 31. Then the load is hoisted by the cable 17 and swung over the car, after which the tripping cord 32 is pulled so as to release one of the bars 28. The head or frame 14 is then raised by the cable 17, thus drawing the basket from beneath the load and leaving the latter straight in the car or any other conveyance it may be loaded in.

Having thus described my invention; I claim as new and desire to secure by Letters Patent—

1. An apparatus of the kind described, comprising a basket having a plurality of connected chains with end cross bars, a hoisting frame or head having supports on the sides to carry the cross bars, means for raising and lowering it, and a tripping lever to force the cross bars from their seat on the head or frame, substantially as described.

2. An apparatus of the kind described, comprising a head or frame, a hoisting device for raising or lowering it, hooks on opposite sides of the head or frame, a basket comprising a plurality of connected chains with end cross bars adapted to lie in the hooks of the head or frame, and a tripping lever pivoted in the head or frame and having a plurality of curved heads to engage and throw out one of the cross bars, substantially as described.

3. An apparatus of the kind described, comprising a suitable derrick, a head or frame carried by the boom of the derrick and provided with hooks upon its opposite sides, a basket comprising a plurality of connected chains having end cross bars to lie in the hooks of the head or frame, a tripping lever pivoted in the head or frame and having a plurality of curved heads to engage and throw out one of the basket cross bars, a weight to hold the tripping lever out of engagement with the cross bar, and a cord secured to the lever to pull it against the tension of the weight, substantially as described.

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Witnesses:
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