

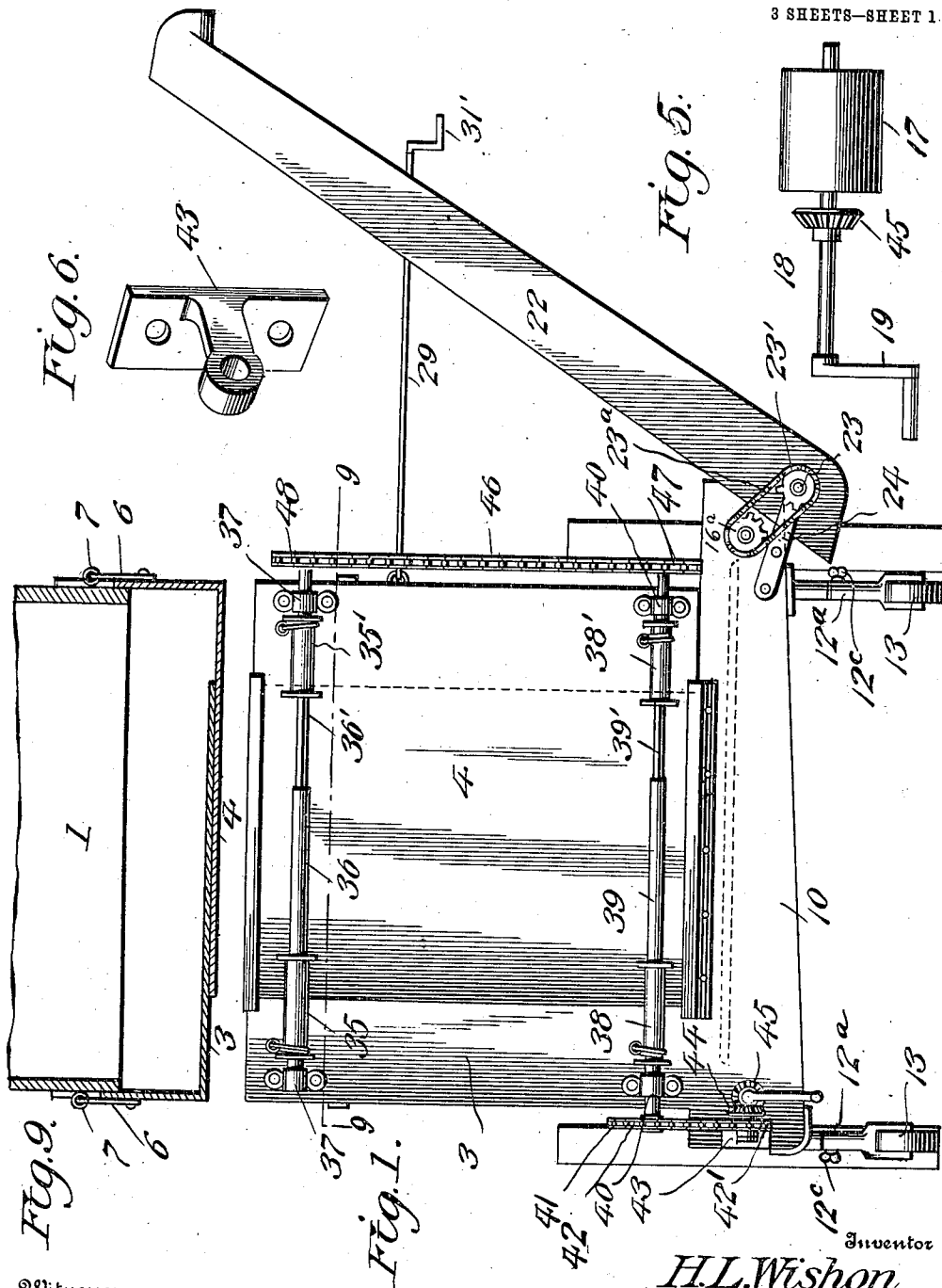
No. 837,170.

PATENTED NOV. 27, 1906.

H. L. WISHON.
UNLOADING ATTACHMENT FOR WAGONS.

APPLICATION FILED SEPT. 16, 1905.

3 SHEETS—SHEET 1.



Witnesses
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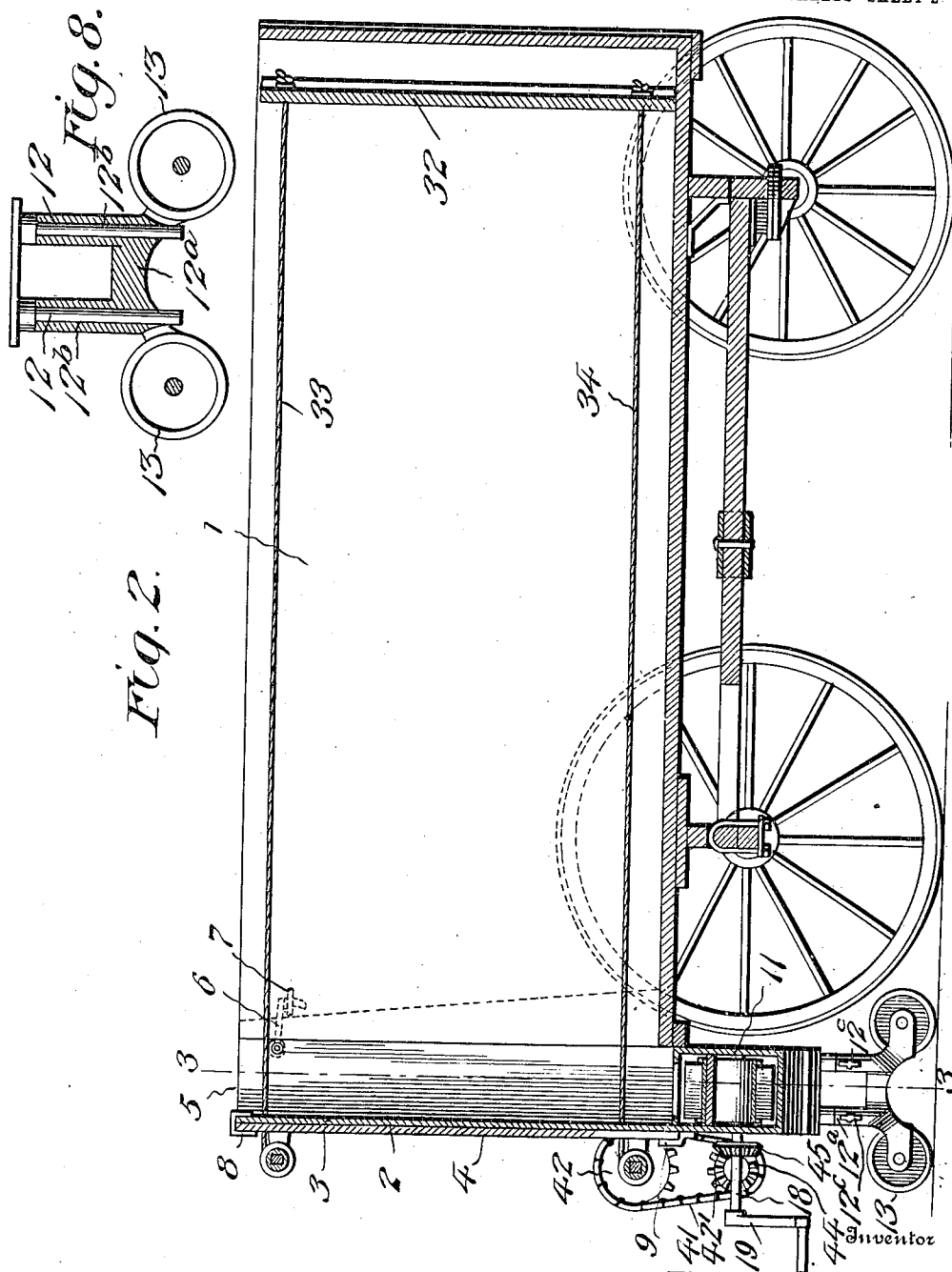
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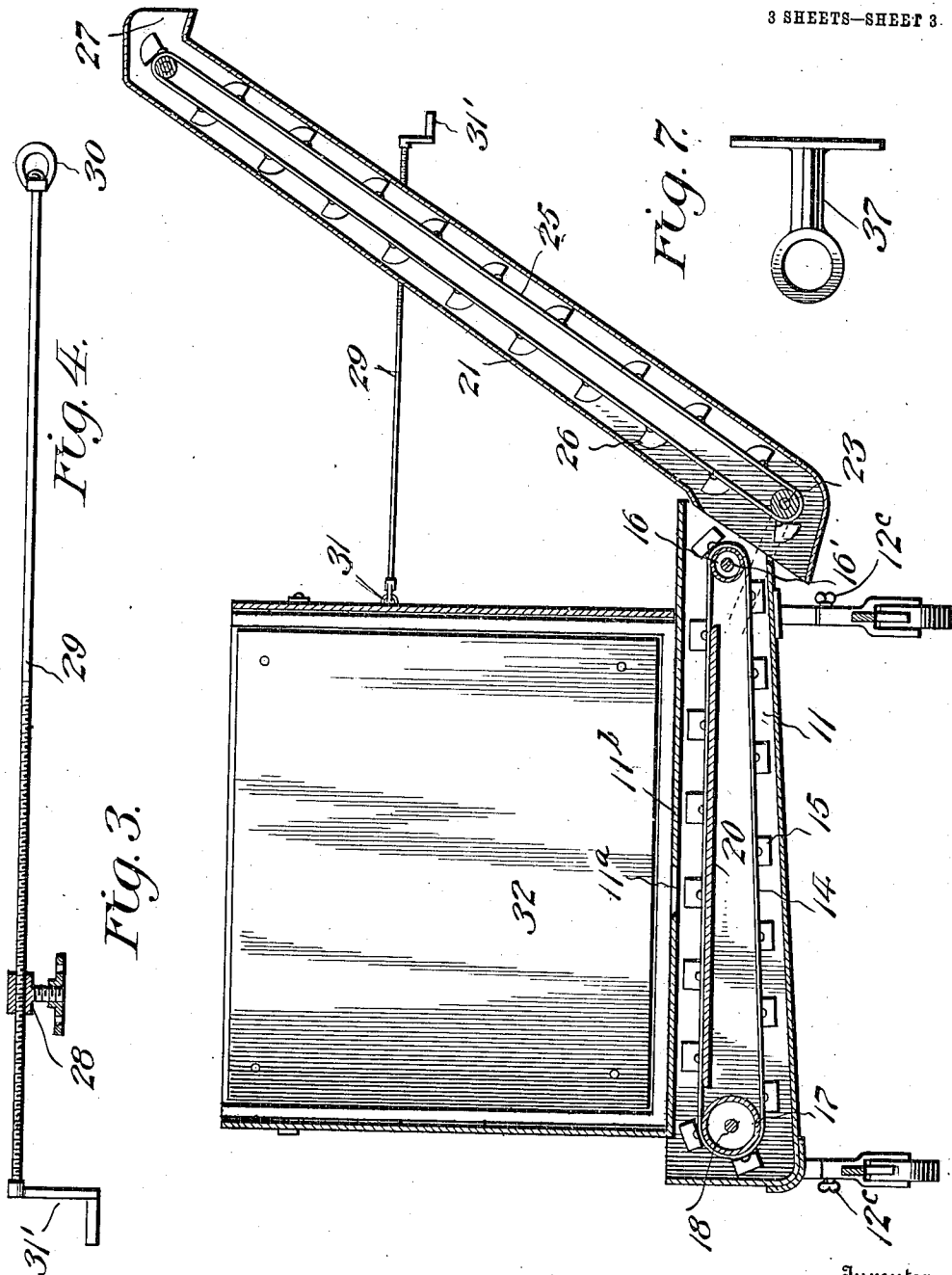
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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

HARBERT L. WISHON, OF STILLWELL, ILLINOIS.

UNLOADING ATTACHMENT FOR WAGONS.

No. 837,170.

Specification of Letters Patent.

Patented Nov. 27, 1906.

Application filed September 16, 1905. Serial No. 278,731.

To all whom it may concern:

Be it known that I, HARBERT L. WISHON, a citizen of the United States of America, residing at Stillwell, in the county of Hancock and State of Illinois, have invented new and useful Improvements in Unloading Attachments for Wagons, of which the following is a specification.

This invention relates to a grain-dump or unloading attachment for wagons, and has for its object to provide a convenient attachment of this character whereby grain or other material may be readily unloaded from a wagon and discharged into a granary or other suitable receptacle.

The preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a rear end elevation of a wagon, showing the application of the invention thereto. Fig. 2 is a longitudinal section through the wagon and attachment. Fig. 3 is a vertical transverse section through the frame of the attachment on the line 3 3 of Fig. 2. Fig. 4 is a detail view of the device for supporting and adjusting the elevator. Fig. 5 is a detail view of the main drive-shaft and drum thereon. Figs. 6 and 7 are detail views of supporting-brackets. Fig. 8 is a section through the wheeled base of the attachment; and Fig. 9 is a horizontal transverse section on line 9 9 of Fig. 1 through the attachment and sides of the wagon-body, the gearing being omitted.

Referring now more particularly to the drawings, the numeral 1 designates a wagon box or body of the type customarily employed for transporting grain and other similar materials. The attachment is adapted for application to the rear end of this bed or box and comprises a drag or wheeled frame 2, composed of a relatively stationary section 3 and an adjustable section 4, said sections being provided at their outer ends with side pieces 5 to overlap the sides of the wagon-body and provided with hooks 6 or like fastening devices to engage eyes 7 on the body to detachably secure the attachment thereto. Any other suitable means for securing the attachment in position may, however, be employed. The section 4 of the frame is mounted at its upper and lower ends in channeled guides 8 and 9, fixed to the section 3, so that it may be adjusted to regulate the width of the frame for application to wagon-boxes of

different widths. The frame member 3 is provided with a horizontal extension 10, projecting beneath the section 4 to a point beyond the outer edge of said section 4 and the adjacent side of the wagon, said extension being of box formation to form a chamber or hopper 11 to receive the material forced from the box 1. Standards 12 project downward from the opposite ends of the horizontal portion 10 and carry supporting wheels or rollers 13 at their lower ends, which rollers sustain the weight of the frame 2 when the device is applied to the wagon-box and also permit said frame to be trundled toward the wagon-box for application thereto and away from the box for removal after the load has been discharged. The wheels 13 are journaled upon a supporting-bracket 12^a, having sockets or passages 12^b to slidably receive said standards, whereby the attachment may be adjusted upon the bracket for application to wagons varying in height. The bracket carries set-screws 12^c to lock the standards 12 thereto in adjusted position.

Arranged within the hopper or receiving-chamber 11 is an endless conveyer 14, provided with buckets 15, adapted to receive the material discharged from the wagon-box and entering the hopper through an inlet-opening 11^a in the top wall 11^b of said hopper, said belt being mounted at its ends upon drums 16 and 17, the drum 17 being carried by a main drive-shaft 18, extending exteriorly and provided with an operating crank-handle 19. Upon turning said shaft 18 to the right the conveyer 14 will be operated and the buckets 15, upon the upper stretch thereof, which moves over a suitable supporting board or member 20, will receive the material entering through the inlet 11^a and convey the same to the outlet end of the hopper 11 for discharge onto an elevator 21. The lower open end of the frame 22 of the elevator is arranged in open communication with the outlet end of the hopper 11 and is pivotally supported upon a shaft 23, carried by brackets 24, fixed to the hopper, and arranged in said frame is an endless conveyer 25, provided with conveyer-buckets 26, adapted to receive the material discharged from the buckets 15 and convey the same to the upper outlet end 27 of the conveyer-frame, which may be arranged to discharge into a granary or other receptacle. The conveyer 25 is suitably supported at its

upper end and passes at its lower end around a drum on the shaft 23, which carries a pinion 23', connected by a belt or chain 23^a with a sprocket-pinion 16^a on the shaft 16', carrying the drum 16, whereby motion will be communicated from the conveyer 14 to the elevator 25, as will be readily understood. The elevator-frame is provided upon one side with a bracket 28, having a screw-threaded bore or socket to receive the outer screw-threaded end of a supporting and adjusting rod 29, having a fastening member 30 at its inner end to pivotally engage a suitable fastening member 31 on the adjacent side of the wagon-box and provided at its outer end with a crank-handle 31'. This rod supports the elevator and permits the same to be adjusted toward and from the wagon-box and to regulate the height of its discharge end, as will be readily understood. Arranged within the wagon-box is a load-discharge device or feeder comprising a follower 32, to the upper and lower portions of which are attached pairs of draft-cables 33 and 34, which extend at their rear ends through openings in the sections 3 and 4 of the frame 1. The follower 32 is normally arranged at the front end of the wagon-body and is adapted to be drawn rearwardly by means acting upon the cables 33 and 34 to force the load toward the rear end of the wagon-body, where it discharges into the hopper 11. The rear ends of the upper cables 33 are respectively attached to winding-drums 35 and 35', fixedly mounted upon shafts 36 and 36', journaled at their outer ends in brackets 37, respectively, carried by the frame-sections 3 and 4. The shaft 36' is polygonal in form or feathered to fit and slide within the correspondingly-shaped tubular shaft 36, thus forming a telescopic shaft which is adjustable with the sections 3 and 4. The rear ends of the cables 34 are similarly attached to drums 38 and 38' upon similarly-constructed shafts 39 and 39', journaled in brackets 40 on the frame-sections. The shaft 38 is adapted to be operated by a sprocket-chain 41, engaging a sprocket-wheel 42 on said shaft and also engaging a sprocket-wheel 42', mounted upon a short shaft journaled upon a bracket 43, fixed to the wall of the base or horizontal extension 10, on which short shaft is also a beveled pinion 44, meshing with a corresponding pinion 45 on the drive-shaft 18. The shaft 39 communicates motion to the shaft 39', which is connected by a sprocket-chain 46 and sprocket-gears 47 and 48 with the shaft 36', whereby the upper and lower shafts will be simultaneously operated to wind up the cables 33 and 34 and draw the follower 32 rearwardly.

In operation the end-gate is removed from the wagon when the latter reaches the point where the load is to be discharged and the loading device applied, after which the ends

of the cables 33 and 34 are attached to their respective winding-drums and the elevator adjusted, if necessary. The apparatus is then operated by means of the hand-crank 19 and motion transmitted to the follower and conveyers to discharge and elevate the material to the delivery-point. After the wagon has been unloaded the device may be detached and applied to a succeeding wagon, and so on. It will thus be seen that the invention provides a simple and convenient form of apparatus which may be attached for unloading purposes to a wagon and that by means of the adjustable sections 3 and 4 the frame may be applied to wagons of different widths.

Having thus described the invention, what is claimed as new is—

1. An unloading attachment for wagons comprising a frame adapted to be attached to the wagon-body, conveying mechanism carried by said frame, means for operating said conveying mechanism, a follower operative in the wagon-body to feed the load to said conveying mechanism, and means actuated by the operating mechanism of the conveyer for moving the follower.

2. A wagon-unloading device comprising a frame adapted for attachment to a wagon-body, conveying mechanism carried by said frame, means for operating said conveying mechanism, and means for adjusting the frame to suit different widths of wagon-bodies.

3. An unloading attachment for wagons comprising a frame adapted to be applied to a wagon-body, an endless conveyer carried by said frame, an elevator mounted upon the frame and adapted to receive the material from said conveyer, and means for operating said conveyer and elevator.

4. An unloading attachment for wagons comprising a frame adapted to be attached to a wagon-body, a conveyer carried by said frame, an elevator pivotally mounted upon the frame, means for operating the conveyer and elevator, and means for adjustably connecting the elevator with the wagon-body.

5. An unloading attachment for wagons comprising a frame adapted to be attached to the wagon-body, conveying mechanism supported by said frame, a follower within the wagon-body for feeding the load toward said conveying mechanism, draft devices for operating said follower, winding-shafts for actuating said draft devices, and means for operating the conveying mechanism and winding-shafts.

6. An unloading attachment for wagons comprising a frame adapted for attachment to the wagon-body, said frame being adjustable as to width, conveying mechanism carried by said frame, a follower in the wagon-body, winding-shafts on the frame adjustable to accord with variations in the width thereof,

cables connecting the follower with said winding-shafts, and means for operating the conveying mechanism and winding-shafts.

5 7. An unloading attachment for wagons comprising a frame adapted for attachment to the wagon-body, said frame having an adjustable section to regulate the width thereof, conveying mechanism supported by said
10 by the frame, a follower in the wagon-body,

draft-cables connecting said follower with the winding-shafts, and mechanism for operating the conveying mechanism and winding-shafts.

In testimony whereof I affix my signature 15
in presence of two witnesses.

HARBERT L. WISHON.

Witnesses:

HENRY F. TANNER,
JOSEPH O. RIPLEY.