

(No Model.)

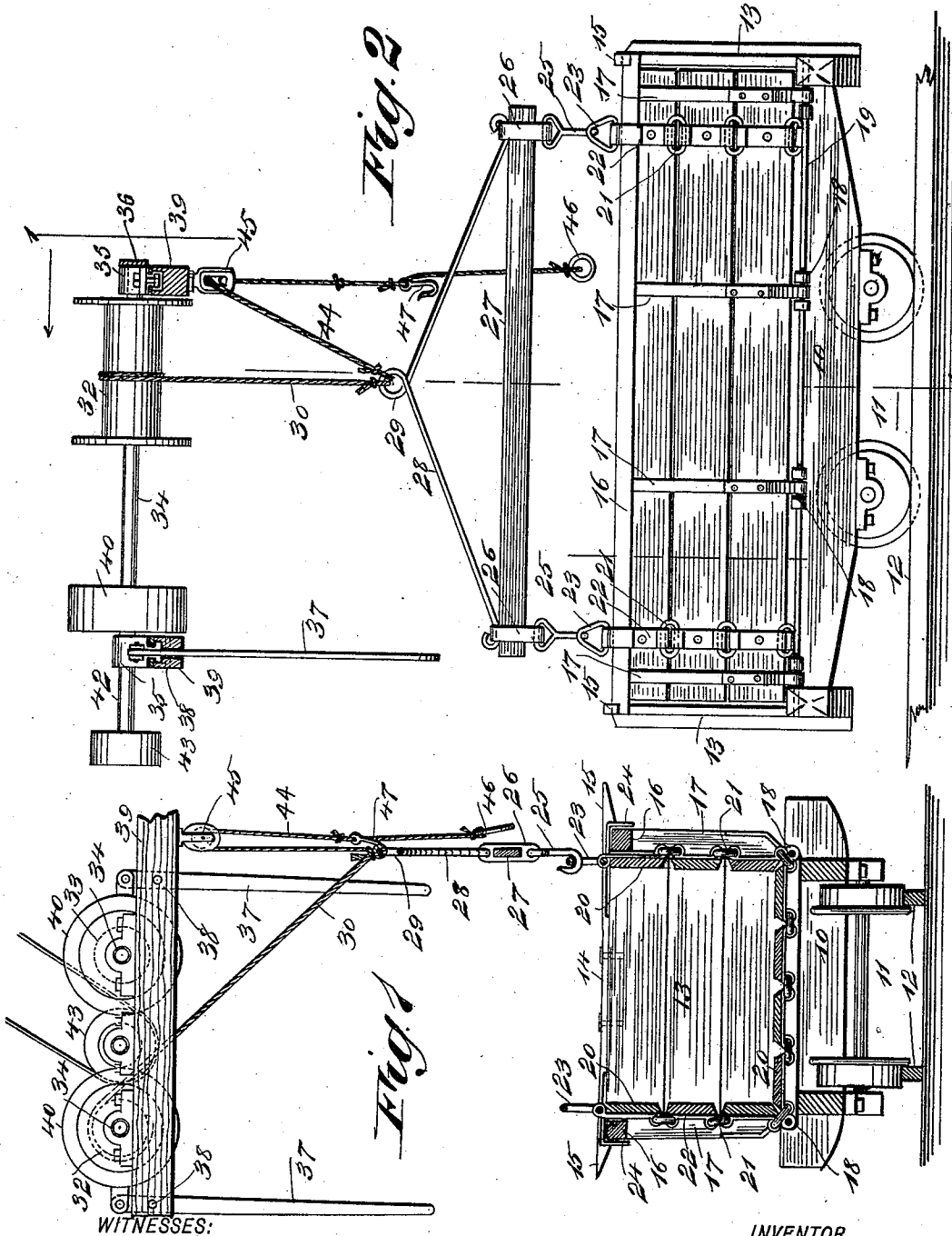
3 Sheets—Sheet 1.

S. W. BEATTY.

DUMPING CAR AND ATTACHMENTS.

No. 529,583.

Patented Nov. 20, 1894.



WITNESSES:

A. Mc Ardle.
W. B. Hutchinson

INVENTOR

S. W. Beatty
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ATTORNEYS.

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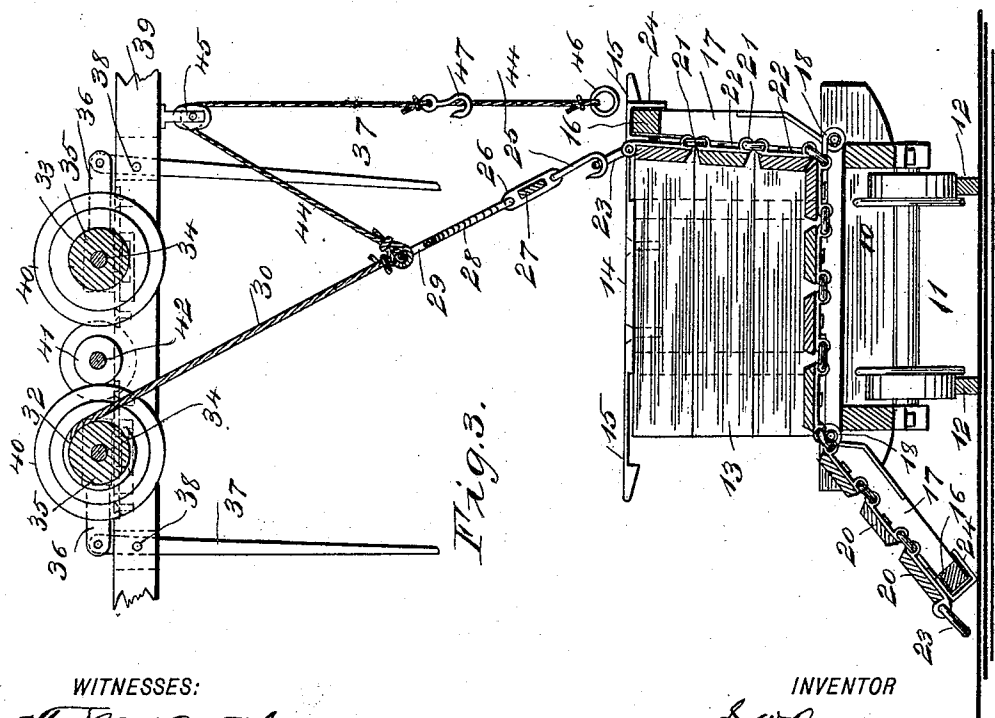
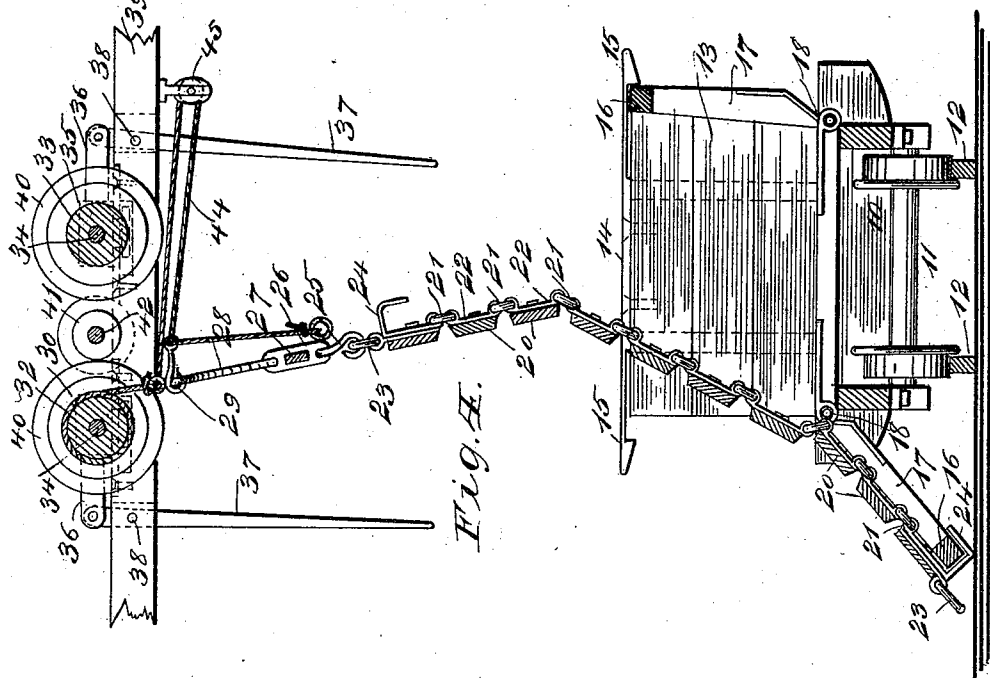
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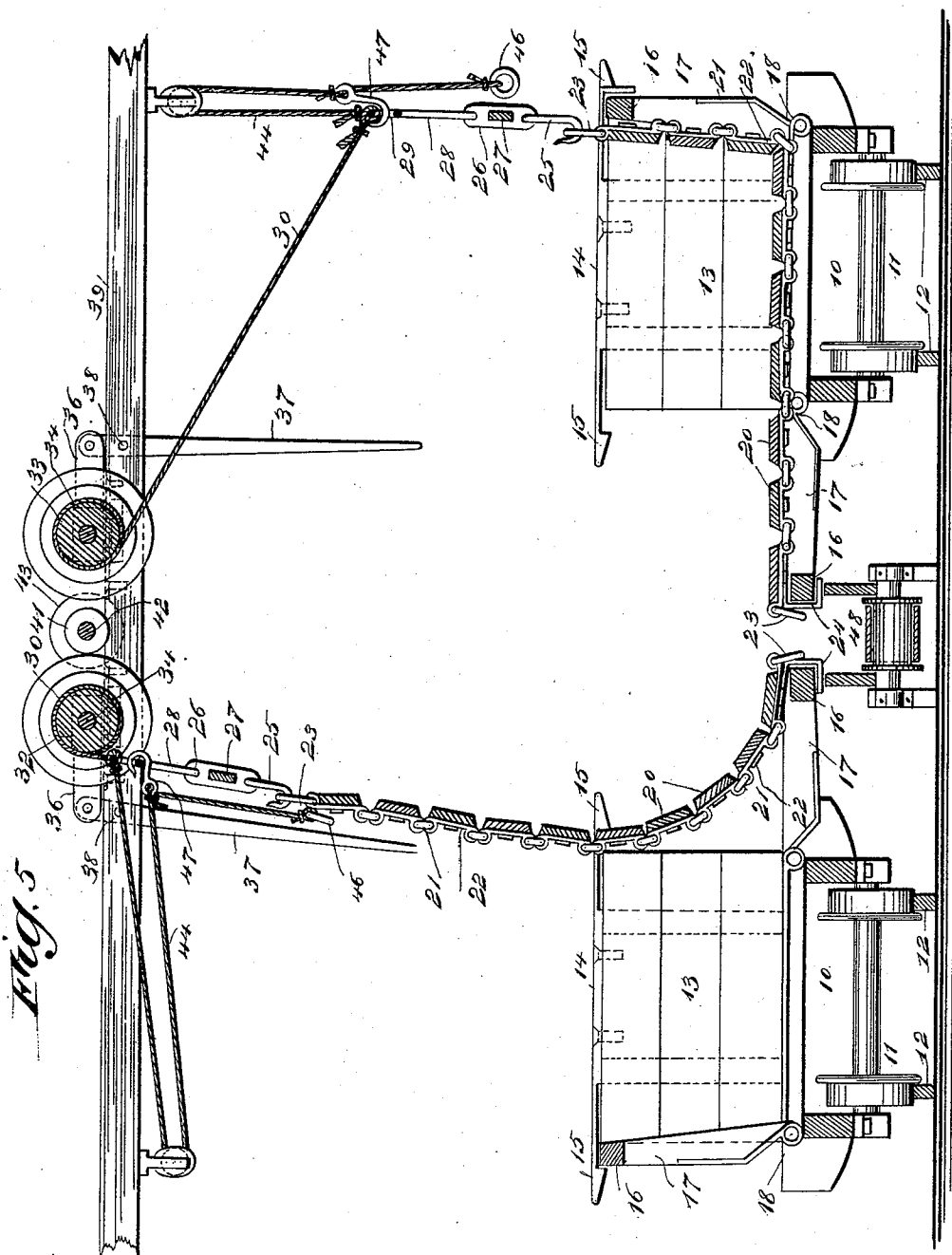
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UNITED STATES PATENT OFFICE.

SAMUEL W. BEATTY, OF BAYOU GOULA, LOUISIANA.

DUMPING-CAR AND ATTACHMENTS.

SPECIFICATION forming part of Letters Patent No. 529,583, dated November 20, 1894.

Application filed May 25, 1894. Serial No. 512,409. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL W. BEATTY, of Bayou Goula, in the parish of Iberville and State of Louisiana, have invented a new and Improved Dumping-Car and Attachments, of which the following is a full, clear, and exact description.

My invention relates to improvements in dumping cars; and the object of my invention is to produce a simple, strong, and durable car of this kind which is peculiarly adapted for carrying and dumping sugar cane but which may be used for carrying and discharging other articles, also to provide, in connection with the car, an easily controlled mechanism by which the dumping may be effected.

To these ends my invention consists of certain features of construction and combinations of parts, which 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 vertical cross section on the line 1—1 of Fig. 2, of the car and dumping attachments embodying my invention. Fig. 2 is a side elevation of the car and dumping attachments, the dumping attachments being shown in longitudinal section. Fig. 3 is a section similar to Fig. 1, showing the car partially dumped. Fig. 4 is a similar section, showing the position of the parts when the car is in position to completely discharge its load; and Fig. 5 is a detail sectional view, showing a preferred arrangement of the dumping apparatus whereby cars may be dumped from parallel tracks upon a common cane carrier.

The car is provided with a bed 10, of the usual kind and which may be of any suitable description, this being mounted on the customary trucks 11 which run on the rails 12 in the usual way. The car has stationary ends 13 on the top edges of which are fastened latches 14 which project beyond the side edges of the car ends and terminate in catches 15 to engage the rails 16 of the side frames of the car, these rails being supported on posts 17 which are hinged, as shown at 18, to rods 19 on the car bed, but the posts may be hinged in any convenient way.

The body portion of the car, that is, the bottom and sides, comprises a series of slats 20 extending the full length of the car and hinged together by means of links 21 and 22, thus forming a flexible body which is adapted to be raised at one edge and swung upward and outward, as shown in Fig. 4, so as to dump its contents at one side of the car. The flexible body has, at its opposite edges, hoisting rings 23 adapted to engage the hoisting mechanism hereinafter described, and hooks 24 which are adapted to engage the rails 16 so as to hold the body in place when the car is in use.

The width of the body, from edge to edge, is such that when the rails 16 are in engagement with the catches 15 and the hooks 24 placed on the rails, the body will just extend across the car bottom and at the sides, so as to form a complete box capable of receiving the same load as an ordinary car. When, however, the car is to be dumped, one side is let down, as shown in Fig. 3, the rail 16 on said side being disengaged from the catch 15 and the other side is then raised so as to discharge the load from the open side of the car. It will be seen that either side of the car may be opened, as described, and the load discharged from said open side.

The hoisting rings 23 are adapted to engage hooks 25 which connect, by means of the clips 26, with a spreader 27 and this has a bent rod 28 secured to the clips which is provided with a central ring 29 adapted to receive the cable 30 which is fastened thereto and which extends upward over either of the drums 32 or 33, according to which side of the car body is to be raised. As illustrated in Figs. 2 and 4, the cable connects with the drum 32, but it will be understood that it may connect with the drum 33 if desired. These drums are carried by shafts 34 which are journaled at one end in sliding boxes 35, the other ends being supported in boxes which permit the necessary movements of the shaft, and the boxes 35 slide on their support 39 and connect by links 36 with levers 37 which are fulcrumed, as shown at 38 in the supporting frame 39 and extend downward to a point where they may be conveniently reached.

The shafts 34 are provided with friction pulleys 40, which are adapted to engage the

friction pulley 41 on the driving shaft 42, which is journaled midway between the shafts 34 and has a driving pulley 43 thereon. It will thus be seen that by means of the levers 5 37, either pulley 40 may be thrown into engagement with the friction pulley 41 and the drum 32 or 33 revolved, while the speed of such revolution may be regulated by the pressure on the lever 34 and in this way the 10 cable may be wound and the load discharged at any desired speed. A second cable 44 is connected to the spreader ring 29 and extends over a pulley 45 on the supporting frame 39 and hangs down within easy reach 15 of the ground, where it terminates in a hand ring 46 while to the cable is secured a hook 47, which may also be placed in engagement with the ring 29, as shown in Fig. 1, and thus when the car is not beneath the hoisting ap- 20 paratus, the hook 47 and cable 44 will hold up the spreader and keep it at the right height to be readily placed in engagement with the rings of the car. The cable 44 and hook 47 also cause the spreader and the flexible body of the car to drop back into place, so that the hooks 24 will engage the rail 16.

The car, loaded and ready to be dumped, is brought beneath the hoisting and dumping apparatus, the hooks 25 are placed in engage- 30 ment with the rings 23 on one side of the car, the opposite side of the car is let down by disengaging the catches 15 from the rail 16 and one of the levers 37 is moved so as to throw one of the pulleys 40 into contact with 35 the pulley 41, and the drum carrying the cable 30 winds up the latter and lifts the flexible body, as shown in Fig. 4, so as to discharge the load.

The dumping apparatus is preferably ar- 40 ranged, as shown in Fig. 5, above parallel tracks, between which is a carrier 48 of the ordinary kind adapted to carry away the cane discharged from the cars. The arrangement 45 illustrated in this figure has duplicate cables 30 and 44 which are connected to the drums 32 and 33, and are adapted to work precisely as already described, but it will be seen that cars may be run along either track and con- 50 nected with one of the hoisting drums, as described, one drum being used for one track and the other for the opposite track, and in this way the cars on both tracks may be dumped equally well and the load delivered to the carrier 48.

55 Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. A railway dumping car comprising the bed mounted on the truck, provided with sta- 60 tionary ends and having both of its sides hinged to swing outward and downward, and a separate and independent flexible bed having suspension hooks or clips at its longitudi- 65 nal edges adapted to detachably engage the upper edges of the said hinged sides, and catches for securing the sides to the ends, sub- stantially as described.

2. The herein-described dumping car, com- 70 prising a suitable bed mounted on trucks and provided with stationary ends, catches on the said ends, swinging side frames hinged to the bed and adapted to engage the catches, and a flexible body comprising a series of hinged slats adapted to connect with the rails of the 75 said frames, substantially as described.

3. The combination, with the car having sta- 80 tionary ends and the catches on the said ends, of the swinging side frames hinged to the bed of the car and provided with rails to engage the catches, the flexible body comprising a series of hinged slats, the hooks on the body 85 to engage the rails of the said frames, and engaging devices, as the rings, secured to the body and adapted to connect with a hoisting device, substantially as described.

4. The combination, with the car having 90 the flexible detachable body, of the hoisting drums arranged above the body, a connection between the said drums and the body, and mechanism for throwing either of said drums into and out of gear, substantially as de- 95 scribed.

5. The combination, with the car having 100 the detachable body, of the spreader having hooks to engage the body, the hoisting drums adapted to connect with the spreader, a driving shaft adjacent to the said drums, and a lever-controlled gear connection between the driving shaft and the drums, substantially as described.

6. The combination of the spreader, the 105 hoisting drums, the connection between the drums and spreader, and a cable connected with the spreader and extending over a guide pulley, and a hand hold and hook secured to the cable, substantially as described.

SAMUEL W. BEATTY.

Witnesses:

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GEO. WAILES.