No. 667,059. Patented Jan. 29, 1901.

J. D. BIRKY.

PORTABLE GRAIN DUMP.

(Application filed May 21, 1900.)

(No Model.) 3 Sheets—Sheet 1.

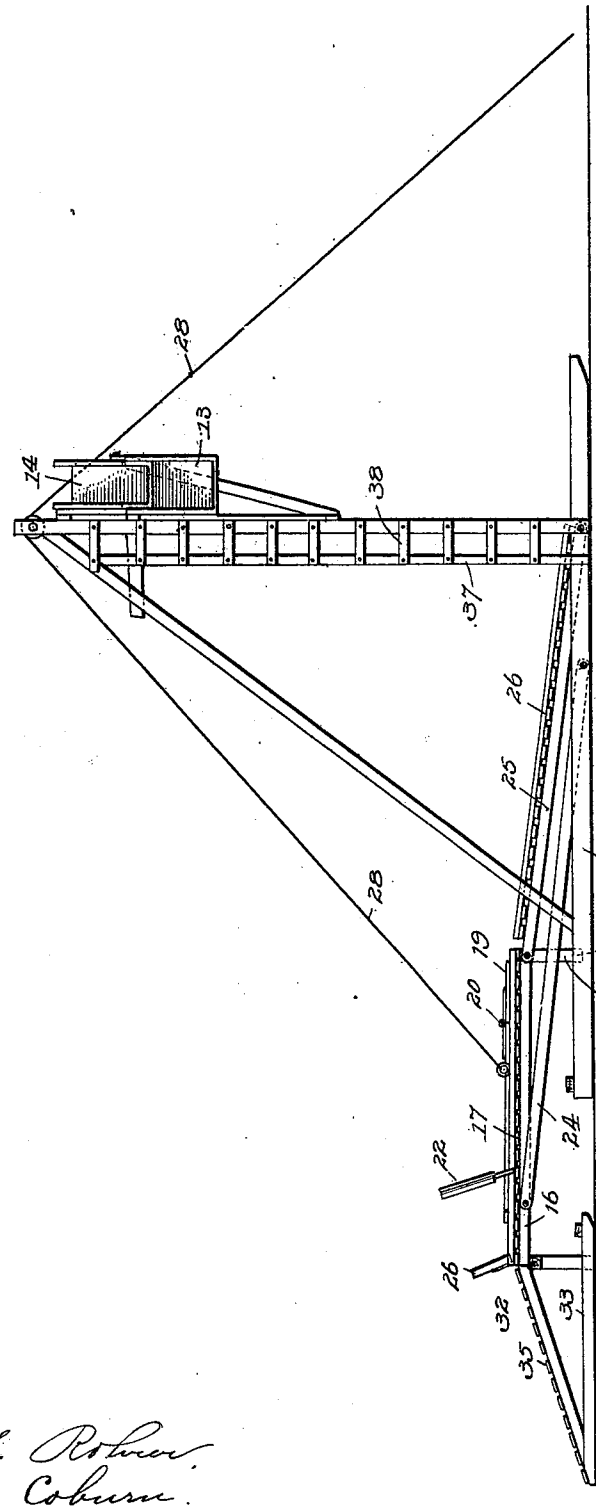

Fig. 1.

Witnesses
Harry S. Robinson.
Lulu C. Coburn.

Inventor
Joseph D. Birky.
By Victor J. Evans
Attorney

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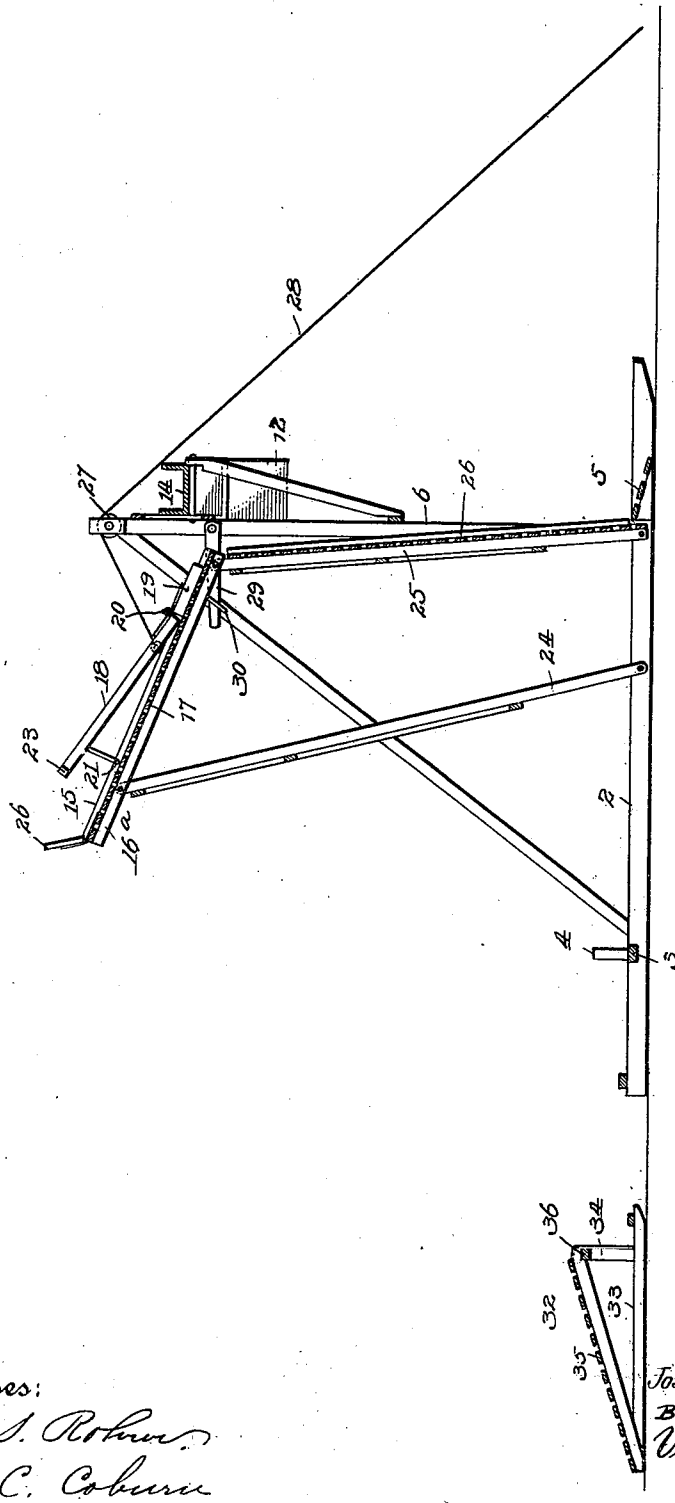
Fig. 2.



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Lulu C. Coburn

Inventor:
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By Victor J. Evans
Attorney

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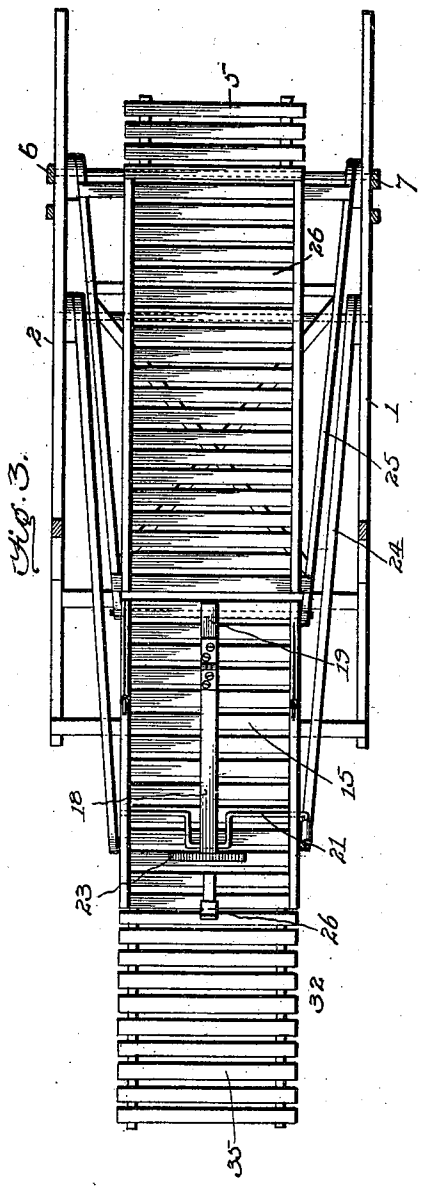

Fig. 3.

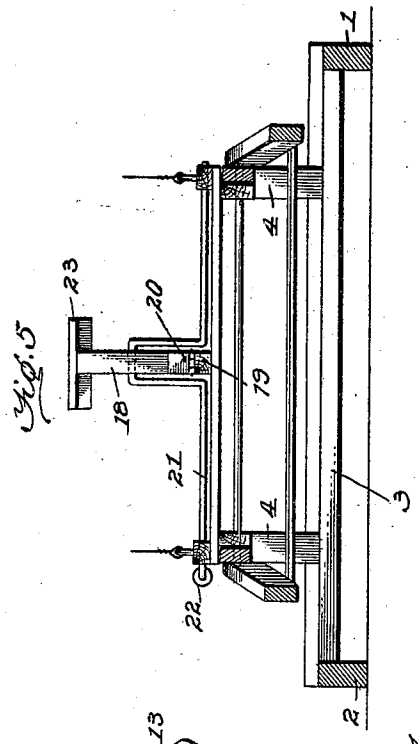

Fig. 5.

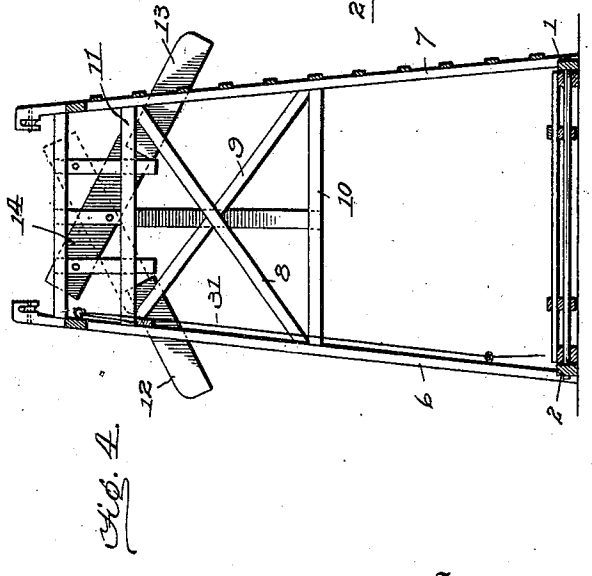

Fig. 4.

Witnesses
Harry S. Robinson,
Lulu C. Coburn.

Inventor:
Joseph D. Birky.
By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

JOSEPH D. BIRKY, OF HOPEDALE, ILLINOIS.

PORTABLE GRAIN-DUMP.

SPECIFICATION forming part of Letters Patent No. 667,059, dated January 29, 1901.

Application filed May 21, 1900. Serial No. 17,382. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH D. BIRKY, a citizen of the United States, residing at Hopedale, in the county of Tazewell and State of Illinois, have invented new and useful Improvements in Portable Grain-Dumps, of which the following is a specification.

This invention relates to portable grain-dumps; and the object is to provide a device of the character described adapted to elevate a wagon or car to a predetermined height, so that the contents thereof may be conveniently conveyed by gravity to a receptacle provided for its reception.

To this end the invention consists in the novel parts and peculiar combination of parts, all of which will be specifically described hereinafter, pointed out in the claims, and illustrated in the drawings, in which—

Figure 1 is a side elevation of a hoist and dump constructed in accordance with my invention and adapted to receive the wagon or car. Fig. 2 is a vertical longitudinal sectional view of the same, illustrating the hoist in its elevated position. Fig. 3 is a top plan view of the device in the position shown in Fig. 1. Fig. 4 is a rear view thereof, and Fig. 5 is a similar view of the supporting-platform on an enlarged scale.

The reference-numerals 1 and 2 designate two sills or runners connected by the cross-beam 3, on which are the supporting-standards 4. These sills or runners are also connected by a plurality of transverse slats 5, which form a flooring upon which the team will be driven in carrying out the purpose of the invention.

6 and 7 designate two vertical beams approximately parallel, which project from the runners near the rear end thereof and are suitably braced by the struts 8 and 9 and the cross-beams 10 and 11.

Oppositely-inclined chutes 12 and 13 are suitably supported upon the respective beams 6 and 7, into which the pivoted trough 14, also carried by said beams, is adapted to alternately empty.

The wagon or car elevating platform 15 comprises two parallel beams or sills 16 and 16^a, on which are secured the flooring-strips 17. A chocking-arm 18 is positioned on this platform intermediate the side sills 16 and 16^a and is hinged to the rigid block 19 by a hinge 20, so that the bent portion of the transversely-arranged rock-shaft 21 can be operated by the handle 22 thereof to raise the free end of the arm 18 and throw the cross-head 23 in engagement with the front axle of the wagon to prevent the same from running down the incline of the platform when in an elevated position.

Two sets of parallel standards (designated by the reference-numerals 24 and 25) are pivotally connected to the runners 1 and 2 and to the platform 15 to support the same in an elevated position, as shown in Fig. 2. The standards 25 are connected by a plurality of transverse strips 26, over which the wagon will pass when being conveyed to the platform 15.

The upwardly-projecting arm 26 on the platform 15 is for the purpose of supporting the tongue of the wagon in an obvious manner. In order to provide a simple and efficient means for elevating this platform, I provide pulleys 27 on the vertical beams 6 and 7, over which pass ropes or cables 28, connected at one end to the platform 15 in any suitable manner. It will of course be understood that any suitable power can be applied to the free ends of the cables for raising the standards 24 and 25 to a vertical position.

The pivoted latch-arm 29 on the standard 6 is provided for engagement with a link or latch strike 30 on the platform 15 and depending from the sills 16^a to retain the same in a raised position; but said latch-arm can be thrown out of engagement with its strike from below by pulling upon the cord or rope 31 to which it is connected and whereby the platform may be lowered through the medium of the cord 28.

32 designates an auxiliary sled having runners 33, vertical standards 34, and an inclined floor 35. This sled will in practice be positioned a suitable distance away from the hoist or dump *per se*, so that when the platform 15 is lowered to receive the wagon the rear end of said platform will rest upon the cross-beam 36 of said sled and its front end will rest upon the supporting-standards 4, as clearly illustrated in Fig. 1.

To enable the operator to readily gain access to the platform 15 when the same is in its elevated position, I provide a strip 37, of suitable material, parallel with the beam 6, and connect the same by a plurality of ladder-rounds 38, which reach a point opposite to the position assumed by the said platform.

The mode of operation is as follows: Supposing the device to be in its normal position, as snown in Fig. 1, the wagon is hauled over the flooring made by arranging the slats 26 in the manner described and onto the platform 15. The draft-animals are then detached from the wagon and driven down the floor of the sled 32. The handle 22 of the rock-shaft 21 is operated to raise the chock-arm 18, so that the head thereof will abut against the front axle of the wagon or some other convenient point, and the tongue is supported upon the arm 26. Suitable power is now applied to the cables 28, which will cause the two sets of pivoted standards 24 and 25 to assume an approximately vertical position, and thereby elevate the platform, and incidentally the wagon, to a point opposite the trough 14, the pivoted catch automatically engaging its strike to retain the parts in the position just described. The end-gate of the wagon can now be raised so as to cause the contents to be deposited into the trough 14, from which said contents will be emptied into the chute 12 or 13, as may be found desirable, and from whence the grain or other matter may be conveyed to a car, bin, or other suitable receptacle provided for its reception. After the grain or other matter has been conveyed from the wagon to the proper receptable the operator may lower the wagon by pulling upon the cord 31 to release the pivoted catch 29, and the wagon may pass down the inclined floor of the sled 32 and away from the hoist.

In order that others skilled in the art to which my invention appertains may make and use the same, I have specifically described the construction thereof, although I reserve the right to make such slight changes and alterations as might suggest themselves from time to time and which come within the scope of my invention without departing from the spirit thereof.

I claim—

1. In a device of the character described, the combination with the auxiliary sled or skid and a portable base; of the vertically-adjustable wagon-supporting platform carried by said base, a hinged chocking-arm positioned on the platform and adapted to engage the front axle of the wagon, a tongue-support also positioned on the platform, and a plurality of chutes carried by the base into which the contents of a wagon positioned on the platform is adapted to empty.

2. In a device of the character described, the combination with a suitable base; of a platform adapted to be adjusted to a predetermined position above the base, and means for holding said platform in its adjusted position, a hinged chocking-arm carried by the platform and positioned intermediate the sides thereof, a rock-shaft for throwing said arm in and out of engagement with the wagon, a tongue-support positioned on the platform and adjacent the chocking-arm.

3. In a device of the character described, the combination with a suitable base; of two sets of pivoted standards secured thereon, said standards being adapted to be raised in a vertical position or lowered upon the base, a plurality of transverse strips connecting one set of standards to form a flooring when said standards are folded on the base, a wagon-carrying platform secured to both sets of standards and adapted to be raised thereby on a higher plane than the base, a vertical trough-support carried by the base into which a wagon on the platform is adapted to empty, and two oppositely-disposed inclined chutes positioned adjacent the trough and adapted to alternately receive the contents thereof.

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

JOSEPH D. BIRKY.

Witnesses:
W. M. STEWART,
GEORGE EICHELBERGER.