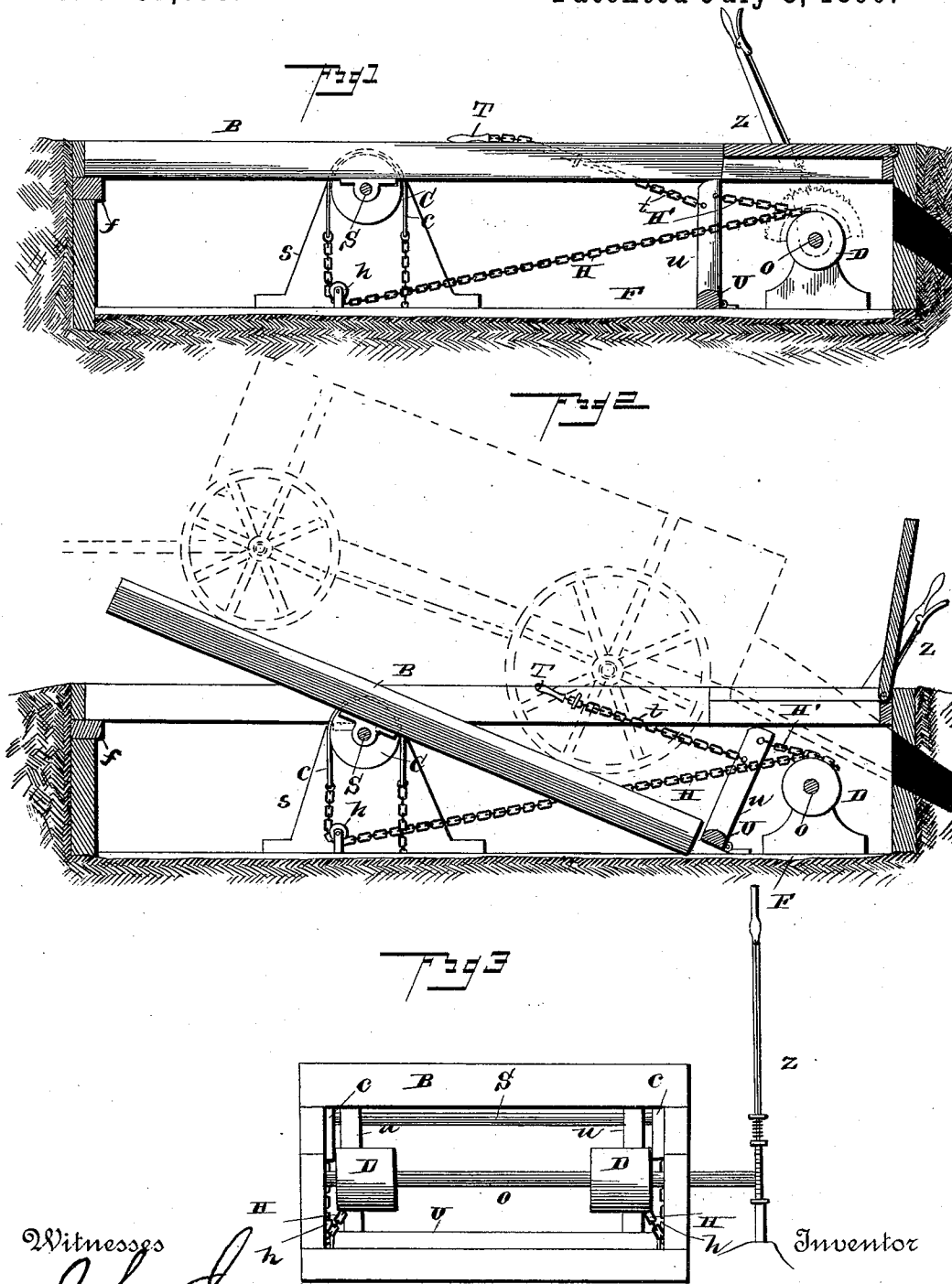


(No Model.)

E. L. THOMS.
WAGON DUMP.

No. 431,678.

Patented July 8, 1890.



Witnesses

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ERNEST L. THOMS, OF ASHBY, MINNESOTA.

WAGON-DUMP.

SPECIFICATION forming part of Letters Patent No. 431,678, dated July 8, 1890.

Application filed February 14, 1890. Serial No. 340,426. (No model.)

To all whom it may concern:

Be it known that I, ERNEST L. THOMS, a citizen of the United States, residing at Ashby, in the county of Grant and State of Minnesota, have invented a new and useful Wagon-Dump, of which the following is a specification.

This invention relates to dumps for wagons; and the invention consists, broadly, in a body mounted on a transverse shaft supported by the main frame-work, hinged supports beneath the rear end of said body, friction-wheels on said supporting-shaft, friction-bands passing thereover, an operating-shaft journaled at the rear end of the frame-work, and chains or cords connecting said operating-shaft with both the supports and the friction-bands, as well as in other arrangements of parts and details of construction, all as hereinafter more particularly described.

In the accompanying drawings, Figure 1 is a central longitudinal section of my improved dump. Fig. 2 is a similar view showing the body in a dumped position. Fig. 3 is a rear elevation of the dump in the position shown in Fig. 1.

The letter S designates the main supporting-shaft, which passes beneath the body B, preferably slightly in front of its center, and upon which said body is supported, the outer ends of said shaft being journaled in and supported by brackets s, rising from the frame-work F at either side, as will be readily understood. At the front end of the frame-work a pair of studs f at either side thereof prevent the tilting down of the body at that end of the frame, and under the rear end of the body a pair of supporting-studs u are rigidly connected to a transverse bar U, which is hinged at its lower edge to the frame-work, as shown in Fig. 1, and which is adapted to hold the body in proper position when the upper ends of the studs are beneath the same, or to permit it to fall to its dumped position, Fig. 2, when said studs are moved backwardly from beneath it.

Upon the supporting-shaft S, and preferably at either side of the body B, is keyed a pair of friction-wheels C, and over these wheels pass metallic straps c, which are con-

nected at their rear ends to the frame-work, as shown, and at their forward ends to chains H, the latter passing thence under pulleys h and along the frame-work F at either side of the body B to drums D, keyed upon an operating-shaft O, which is journaled transversely in the frame F at the rear of the body and provided with a handle Z at one end. Other chains H' connect the upper ends of the supporting-studs u with said drums D, as shown.

The parts being correctly assembled, the operation of my device is as follows: When it is desired to dump a wagon, it is driven onto the device with its wheels resting on the body B, as shown, and the handle Z is turned upon in the proper direction, whereby a tension is imparted to the chain H'. The upper ends of the studs u are thereby pulled from beneath the rear end of the body B and the latter begins to descend; but just at this moment the continued revolution of the drums D imparts a tension to the chains H, resulting in a tightening of the metallic straps c upon the friction-wheels C. As said wheels are keyed upon the supporting-shafts S, which is now turning with the body as the latter is tilting, the friction, which is caused by the drawing of said straps tightly against the faces of said friction-wheels, tends to retard the dumping operation to an extent only limited by the amount of tension imparted by the chains H. It will thus be seen that a wagon or cart containing one, or even two, tons may be successfully dumped, and that in such a manner as to pour the load slowly from the tail of the wagon—as, for instance, when it is desired to dump grain into a chute or into a trough leading to a cellar-window. The body is then returned to its normal position, as shown in Fig. 1, and the cross-bar U is turned upon its hinges by drawing on the handles T, connected with chains t, so that the upper ends of the supporting-stud u will come under the rear end of the body and support the same. In moving these studs forward a tension will of course be imparted to the chains H', and the drums D will be turned in the opposite direction, whereby the tension of the chains H will be removed and

the box can be turned on its supporting-shaft S with ease. The wagon may then be driven from the dump, as usual.

Having thus described my invention, what I claim is—

1. A wagon-dump comprising a stationary frame, a supporting-shaft journaled across the same, a body supported by the shaft, friction-drums upon said shaft, supporting-studs under said body, and means, substantially as described, for simultaneously withdrawing said supporting-studs and applying a friction to said drums, as and for the purpose described.

2. In a wagon-dump, the combination, with the stationary frame F and the supporting-studs *u*, hinged to the same near its rear end, of the supporting-shaft S, journaled in said frame, the body mounted on the said shaft, the friction-wheels C, keyed to said shaft at each side of the box, the metallic straps *c*, passing around said wheels, and means, substantially as described, for tripping said supporting-studs and simultaneously imparting a tension to said metallic straps, as and for the purpose described.

3. In a wagon-dump, the combination, with the stationary frame F, the standards *s* thereon, the shaft O, journaled across the rear end of said frame and having the crank Z, and the drums D on said shaft, of the supporting-shaft S, journaled in said standards, the body B, mounted on said shaft, the friction-wheels C, keyed to said shaft at each side of the body, the metallic straps *c*, secured to said frame and passing over said wheels, and chains H, connected to said straps, passing around pulleys *h* and connected to the drums D, substantially as and for the purpose set forth.

4. In a wagon-dump, the combination, with

the stationary frame F, having standards *s*, the supporting-shaft S, journaled in said standards, the body B, mounted on said shaft, the friction-wheels C, keyed to said shaft at each side of the body, and means, substantially as described, for imparting friction to said wheels, of the transverse bar U, hinged to said frame under the rear end of said body, the supporting-studs *u*, projecting upward from said bar, the shaft O, journaled across the rear end of said frame and having the crank Z, the drums D on said shaft, and the chains H', connecting said drums with the upper ends of said studs, substantially as and for the purpose set forth.

5. In a wagon-dump, the combination, with the main frame F, the shaft O, journaled across the rear end thereof and having a crank Z, and the drums D on said shaft, of the body B, mounted on a supporting-shaft S, journaled in said frame, friction-wheels C, keyed to said shaft at each side of the box, metallic straps *c*, passing around said friction-wheels, and chains H, leading from the front ends of said metallic straps under pulleys *h* and to the drums D, the cross-bar U, hinged to said frame, the upwardly-extending studs *u*, carried thereby and supporting the rear end of the body, and the chains H', connecting said studs with said drums, the connections being such that the rotation of the drums will first trip the studs and then immediately apply the brake-straps *c*, as and for the purpose set forth.

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

ERNEST L. THOMS.

Witnesses:

N. Q. PUNTCHES,
FRANK PRESTON.