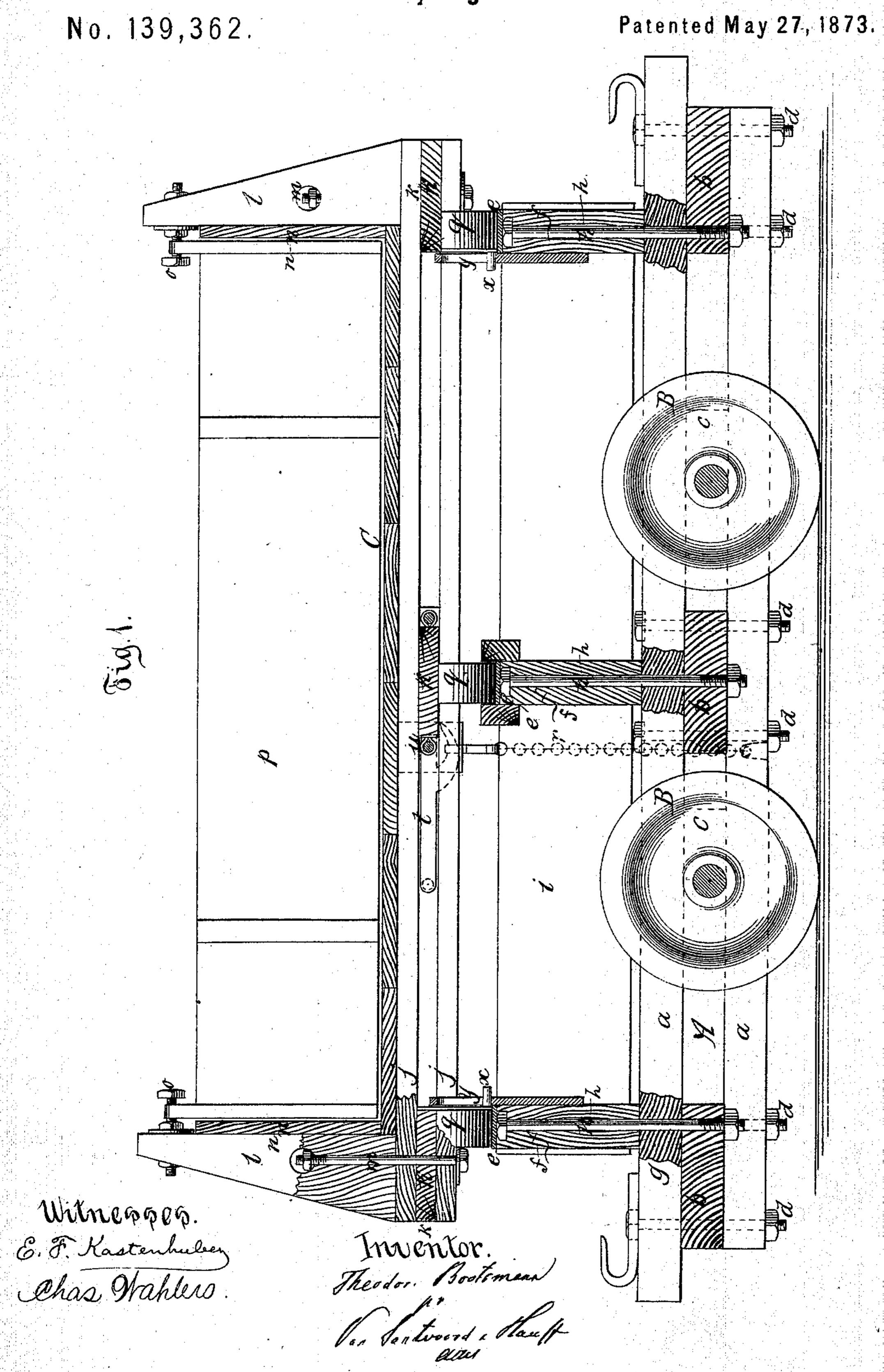
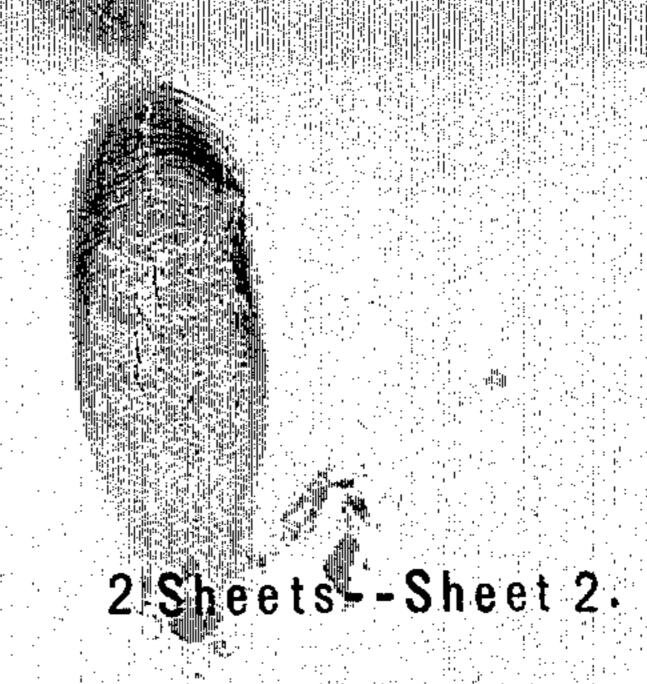
2 Sheets--Sheet 1.

T. BOOTSMANN.
Dumping Cars.



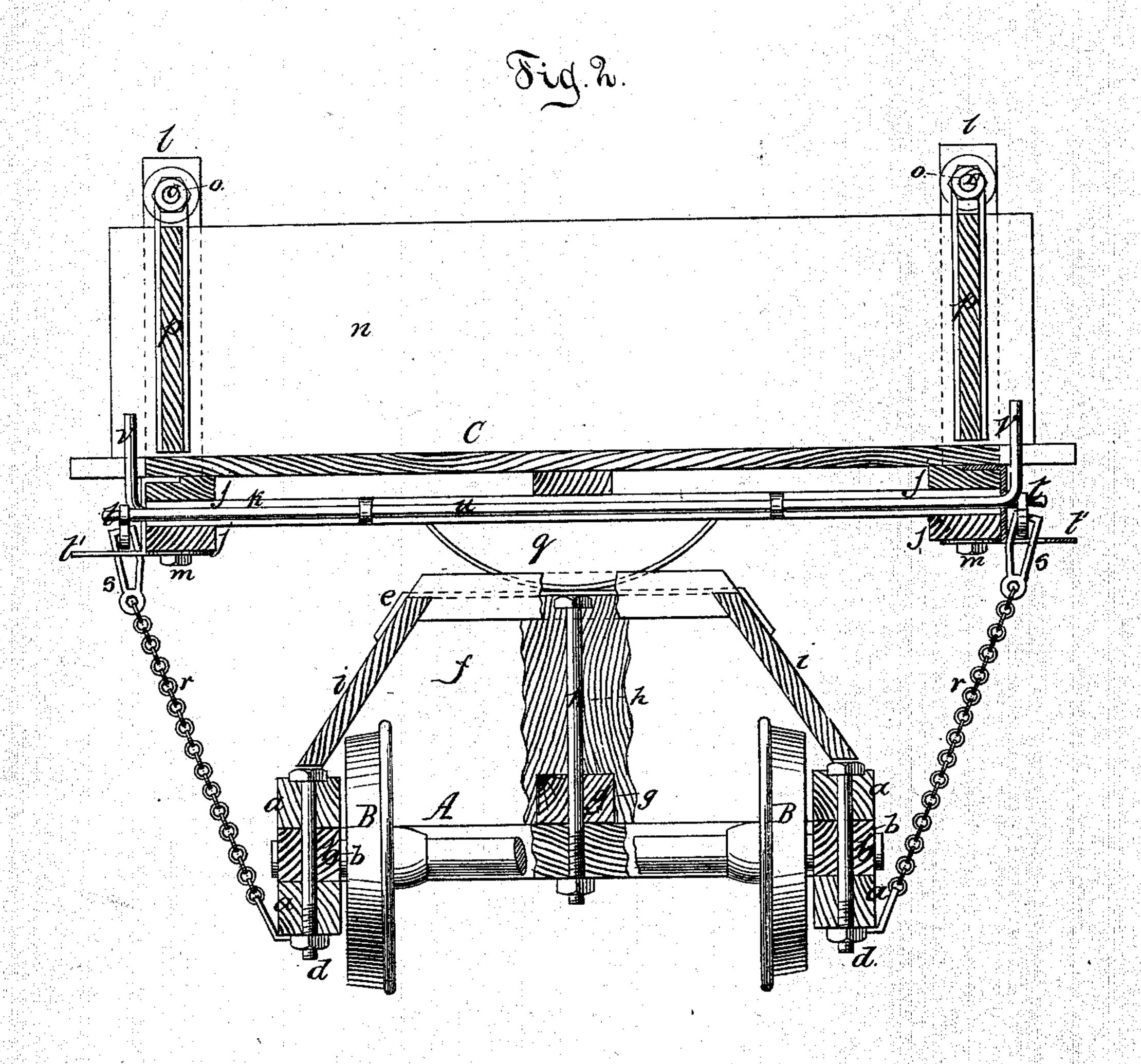
AM, PHOTO-LITHOGRAPHIC CO. N.Y (OSBORNE'S PROCESS.)



T. BOOTSMANN. Dumping Cars.

No. 139,362.

Patented May 27, 1873.



E. F. Kastenhuleer Chas Wahlers. Monton Sorteman

UNITED STATES PATENT OFFICE.

THEODOR BOOTSMANN, OF NEW BRIGHTON, NEW YORK.

IMPROVEMENT IN DUMPING-CARS.

Specification forming part of Letters Patent No. 139,362, dated May 27, 1873; application filed March 28, 1873.

To all whom it may concern:

Be it known that I, Theodor Bootsmann, of New Brighton, in the county of Richmond and State of New York, have invented a new and useful Improvement in Dumping-Cars; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a longitudinal vertical section of my invention. Fig. 2 is a trans-

verse vertical section of the same.

Similar letters indicate corresponding parts. This invention relates to a dumping-car, the truck of which is constructed with a double set of longitudinal side timbers, between which are clamped the cross-timbers and also the axle-boxes of the wheels in such a manner that all the parts can be connected by screwbolts without mortises; and furthermore a truck of great strength and very little height is produced, whereby the same is rendered particularly serviceable for a dumping car. A central longitudinal beam increases the strength of the truck, and from the longitudinal side timbers rise incline fenders, which protect the journals and the axle-boxes against dirt or sand. The box of my car is also constructed of a double set of longitudinal side timbers with cross-timbers clamped between them, and with a central longitudinal beam that serves to support the middle of the body, and with corner standards, to which the stationary ends and also the hinged sides of the box are attached, the whole being connected by screw-bolts and without a mortise, whereby the labor of constructing the box is materially reduced, and a box of great strength is obtained. The box is supported by rockers that run on rails secured to the truck; and it is held in a central position by chains and lever-catches. These catches are mounted on rods extending transversely across the box beneath its bottom, and provided with stops, which prevent the doors of the box from swinging open in such a manner that whenever one of the lever-catches is turned to release its chain the stop on the opposite side of the box is withdrawn from its door, and the box turns

down to an inclined position, the door swings open, and the contents of the box are free to discharge.

In the drawing, the letter A designates the truck of my dumping-car, which is constructed of a double set of longitudinal side timbers, a a, between which are clamped the cross-tim-. bers b b, and also the boxes c c, which form the bearings for the axles of the wheels B. The longitudinal timbers a a and the cross-timbers b b are held together simply by screw-bolts d d so that no mortise is required, and at the same time the height of the truck is materially reduced, and thereby said truck is rendered particularly valuable for a dumping-car, since the car, when built low, is not liable to tumble over during the operation of dumping. On the truck A are formed three transverse rails, e, which are supported by sleepers f; and these sleepers catch over a longitudinal central beam, g, being secured to the cross-timbers b b of the truck by screw-bolts h. By this central beam the strength of my truck is increased. The sides of the sleepers f are inclined, and they support fenders i, which protect the axleboxes and journals against dirt and sand. C is the box of my car. This box is constructed of a double set of longitudinal timbers, jj, between which are clamped the cross-timbers kk, and from the ends of which rise corner-standards l l, all these parts being secured together by screw-bolts m m without requiring any mortises, whereby the labor of constructing the box is materially reduced. A central longitudinal bar serves to strengthen the box. To the corner-standards ll are firmly secured the end pieces n n of the box, and said standards are provided with pivots oo, from which are suspended the swinging doors p p. My box is provided with rockers q, which rest upon the rails e of the truck, and it is retained in a horizontal position by chains r, which are secured to the truck, and provided with eyes s that can be passed up through slots in brackets t' fastened to longitudinal timbers of the box. With these chains are combined lever-catches t, the toes of which, when made to enter the eyes of the chains, serve to lock the box in a horizontal position. Said lever-catches are mounted on rods u, which extend through under the bottom of the box, and are provided

with stops v to prevent the doors of the box

from swinging open.

Whenever one of the lever-catches is turned so as to release its chain and allow the box to turn down on one side, the stop on that side toward which the box turns is withdrawn from the door, and said door is free to swing open, thus allowing the contents of the box to discharge. When the box is brought back to its horizontal position the door which had swung open returns to its vertical position, and by causing the lever-catch to enter the eye of its chain, the stop of the door is also returned to its locking position, and the box is ready for a new charge.

From the rockers of the box project pins x, which catch in open eyes in brackets y secured to the sleepers f, for the purpose of preventing the box from turning toward either side

any further than described.

What I claim as new, and desire to secure

by Letters Patent, is—

1. The combination of longitudinal timbers a a having cross-timbers b clamped between them with a central longitudinal beam, g, fenders i, and sleepers f, connected together by screw-bolts h, substantially as set forth.

2. The lever-catches t mounted on rods u, which extend transversely under the bottom of the box C, and carry stops v, in combination with chains r and with the swinging doors pof a box, C, supported by rockers q, substantially as set forth.

T. BOOTSMANN.

Witnesses:

W. HAUFF, A. HILT NORRIS.