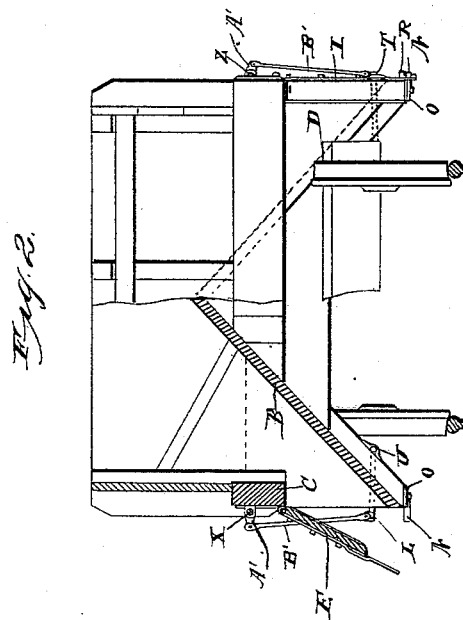
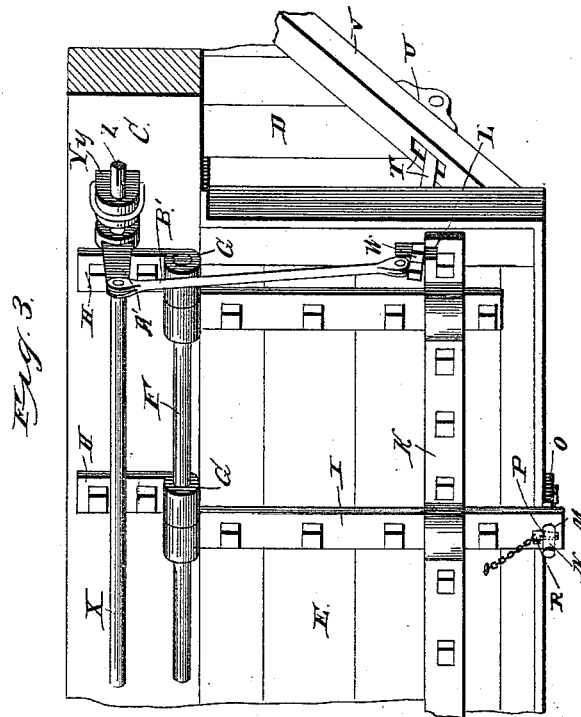
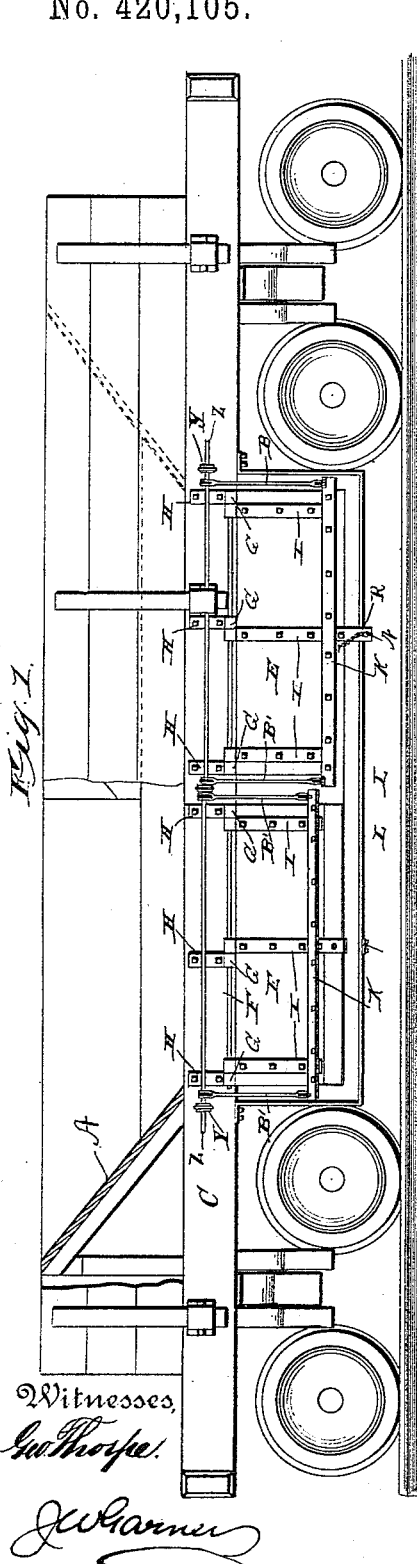


(No Model.)

G. ROSS.
DUMPING CAR.

No. 420,105.

Patented Jan. 28, 1890.



Inventor,
Geo. Ross.

By *W. H. Warner* Attorneys

W. H. Warner

UNITED STATES PATENT OFFICE.

GEORGE ROSS, OF SOUTH BUTTE, MONTANA.

DUMPING-CAR.

SPECIFICATION forming part of Letters Patent No. 420,105, dated January 28, 1890.

Application filed February 8, 1889. Serial No. 299,184. (No model.)

To all whom it may concern:

Be it known that I, GEORGE ROSS, a citizen of the United States, residing at South Butte, in the county of Silver Bow and Territory of Montana, have invented a new and useful Improvement in Dump-Cars, of which the following is a specification.

My invention relates to an improvement in dump-cars; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation, partly in section, of a dump-car embodying my improvement. Fig. 2 is partly an end elevation and partly a vertical transverse sectional view of the same. Fig. 3 is an enlarged perspective view of a portion of the car-body, showing one of the hinged doors thereof and the devices for securing and releasing the said door.

The body of the car is provided with the inclined planes A at its ends, and the bottom of the car is formed of a pair of oppositely-inclined downwardly-diverging planes B, the said planes B extending below the frame or platform C of the car. End boards D are secured on the ends of those portions of the planes B which extend below the frame or platform C, and thereby incase the same, as will be readily understood.

On each side of the car are a pair of doors E, which are hinged at their upper ends on longitudinal rods F, the said rods being secured in bearings G, formed at the lower ends of vertical plates H, which are bolted on the sides of the frame, and the said doors being hinged to the said rods by means of vertical plates I, which are bolted to the outer sides of the doors and have eyes formed at their upper ends, and through which the rods F extend.

Extending longitudinally on the outer side of each door E, near the lower edge thereof, and bolted to the said doors, are latch-bars K, the ends of which project beyond the ends of the doors and are provided in their upper edges with notches L. The central plate I of each door has its lower end extended, and is provided with an opening M, adapted to receive an arm or stud N, which is formed integrally with and projects from a plate O, bolted to

the under side of the case. In said arm or stud is a vertical opening or slot P, in which is fitted a key R, the same serving to secure the door when fastened and being adapted to be readily withdrawn from the opening K to enable the door to be opened.

T represents latches, which are pivoted in blocks U, bolted to the under sides of inclined bars V at the ends of the casing. Said latches are provided at their outer ends with notches or recesses W, adapted to engage the notches L of the latch-bars K, and thereby secure the ends of the doors.

X represents longitudinal rock-shafts, which are journaled in bearings Y on the sides of the car-frame, have their ends squared, as at Z, to adapt them to be engaged by a wrench or lever, and are provided with arms A'. Link-rods B' connect the said arms to the free ends of the latches T.

The operation of my invention is as follows: In order to dump the contents of the car, the keys R are first removed from the openings P, and the rock-shafts X are then turned and caused to raise the latches T and thereby disengage the ends of the doors, when the weight of the contents of the car will cause the same to open the doors, and the load will be discharged, as will be very readily understood. Any one of the doors may be thus operated while the others are closed, or all the doors may be operated simultaneously, according to the exigencies of the case.

Having thus described the invention, I claim—

1. In a dump-car, the combination of the frame, the bottom formed of inclined sides and ends and having a central longitudinal ridge, the swinging doors hinged to the frame above and closing against the lower edges of the sides of the bottom, the latch-bars at the lower edges of the doors, extending beyond the ends of the same and having notches formed in their projecting ends, the latches pivoted to the frame, and mechanism for operating the latches at both ends of the doors simultaneously, substantially as set forth.

2. The combination, in a dump-car, of the frame, the inclined bottom, the swinging doors having latch-bars at their lower edges provided with notched extensions, the pivoted latches, the longitudinal shaft or shafts jour-

naled above the doors and having outwardly-extending arms, and the links connecting said arms with the latches, as herein set forth.

3. In a dump-car, the combination of the
5 frame, the bottom having inclined sides, the doors hinged to the frame and closing against the lower edges of the sides, the latch-bars at the lower edges of the doors and having notched extensions, the latches engaging the
10 latter, the hinge-straps extending beyond the lower edge of the doors and having slots formed in their projecting ends, the slotted

arms secured to the car-frame and engaging said slotted extensions of the hinge-straps, and the keys adapted to be fitted in said slot- 15
ted arms, substantially as set forth.

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

GEORGE ROSS.

Witnesses:

H. R. BURG,
A. B. BEAN.