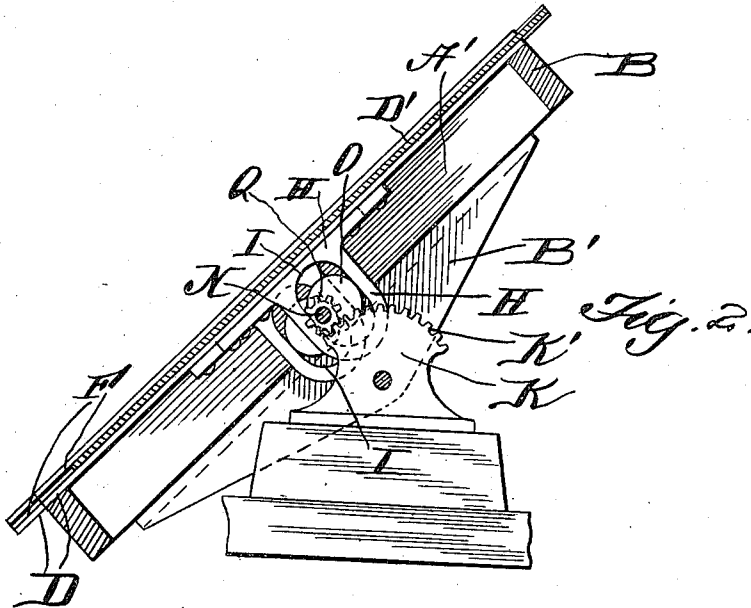
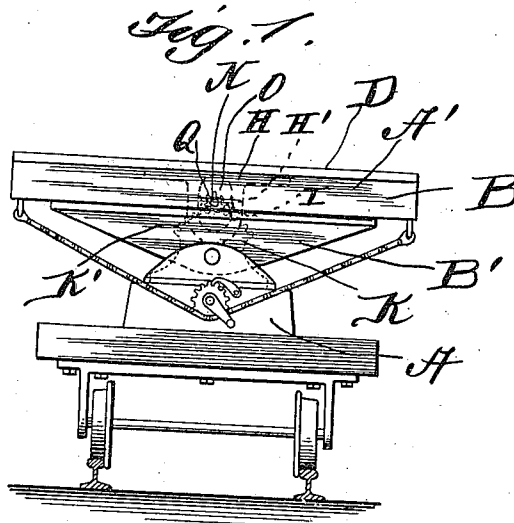


964,175.

B. L. NEWELL.
DUMPING CAR.
APPLICATION FILED APR. 20, 1910.

Patented July 12, 1910.
2 SHEETS—SHEET 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

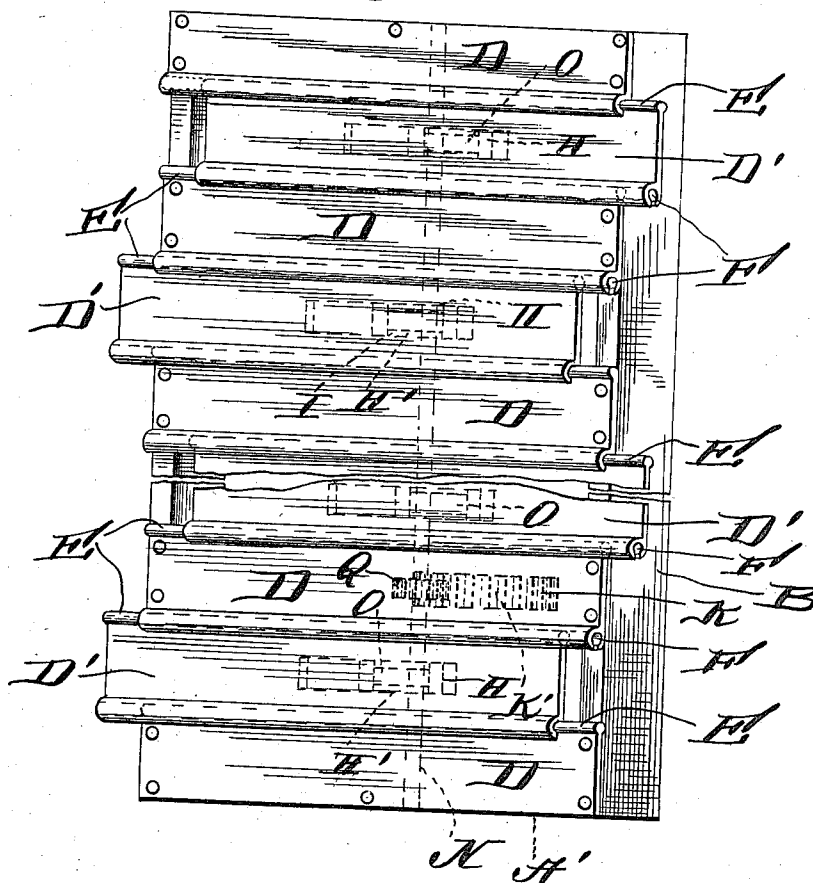
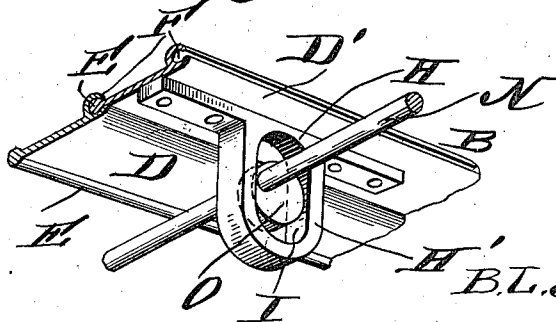


Fig. 4.



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UNITED STATES PATENT OFFICE.

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DUMPING-CAR.

964,175.

Specification of Letters Patent. Patented July 12, 1910.

Application filed April 20, 1910. Serial No. 556,498.

To all whom it may concern:

Be it known that I, BERTRAM L. NEWELL, a citizen of the United States, residing at Boulder, in the county of Boulder and State of Colorado, have invented certain new and useful Improvements in Dumping-Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in dumping cars and the object in view is to produce a simple and efficient apparatus of this nature so constructed that the dirt or other material being conveyed in the car and which it is desired to dump may be loosened to allow the contents of the car to be readily dumped without a part of the load still clinging to the car.

The invention comprises various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, in which:—

Figure 1 is an end view of a car showing the platform in its normal horizontal position. Fig. 2 is a similar view showing the platform tilted in the act of dumping the load. Fig. 3 is a plan view, and Fig. 4 is a detail perspective view of a part of the invention.

Reference now being had to the details of the drawings by letter, A designates the truck of a car and B the tilting platform having lugs B' projecting therefrom and pivotally mounted upon the truck, as shown clearly in Figs. 1 and 2 of the drawings.

The floor of the car comprises a series of transversely disposed plates D and D', the former of which are stationary and the latter adapted to have sliding longitudinal movements. One edge of each plate is provided with a longitudinal marginal rib E, preferably rounded as shown, and its opposite edge is provided with a concaved groove F of sufficient size to receive the rib upon the edge of an adjacent plate. Each of the longitudinally movable plates D' has a shifting block H riveted or otherwise se-

curely fastened to its under surface at any suitable location, preferably adjacent to its longitudinal center and each of said shifting blocks is provided with a downwardly projecting portion H' having an elongated opening I therein. A shaft N is journaled in suitable bearings on the end beams A' of the platform, and O designates cams which are fixed to said shaft N and each adapted to be positioned in one of said openings I in the shifting block so that each of the movable plates D' may be given longitudinal movements in one direction or the other simultaneously as the shaft N is rocked in one direction or the other. Fastened to the upper portion of the truck is a segment rack K having a convexed series of teeth K' upon its upper edge adapted to mesh with a pinion wheel Q which is keyed to the shaft N.

The operation of the invention will be readily understood and is as follows:— When the parts of the apparatus are adjusted as shown in Fig. 1 of the drawings and as the platform is tilted by any suitable mechanism, the pinion will be caused to rotate and also the shaft carrying the same by means of said pinions meshing with the teeth of the segment rack. As the shaft N rotates, the alternate interlocking and floor plates D' will be simultaneously moved in one direction or the other, leaving a slight series of holes upon one side or the other upon the car and which will have a tendency to break up the dirt or other material being dumped and prevent the same from adhering to the floor or other parts of the car as is a common trouble with the ordinary type of dumping cars.

What I claim to be new is:—

1. A dumping car comprising a truck, a platform pivotally mounted thereon and having a series of movable floor plates, a shaft journaled upon said platform, a pinion wheel fixed to said shaft, a segment rack upon the truck meshing with said pinion wheel, and means for moving certain of the floor plates automatically as the platform tilts.

2. A dumping car comprising a truck, a platform pivotally mounted thereon and having a series of movable floor plates, a shaft journaled in said platform, a pinion wheel fixed to said shaft, a segment rack upon the truck meshing with said pinion wheel, means fixed to said shaft and

adapted to engage the movable plates of the flooring to form openings as the platform tilts.

3. A dumping car comprising a truck, 5
a platform pivotally mounted thereon and having a series of movable floor plates, a shaft journaled in said platform, a pinion wheel fixed to said shaft, a segment rack 10
upon the truck meshing with said pinion wheel, cams fixed to the shaft, a shifting block fixed to each of said movable plates and having an opening in which one of said 15
cams is adapted to rotate to move the plate longitudinally.

4. A dumping car comprising a truck, 15
a platform pivotally mounted thereon and having a series of fixed and movable interlocking plates, a shifting block upon each movable plate and provided with an open- 20
ing, and cams fixed to said shaft and one movable within each opening in the shifting block.

5. In combination with the truck of a dumping car, a platform pivotally mounted thereon, a series of floor plates, each having 25
a longitudinal rib at one edge and its opposite edge grooved longitudinally to receive a rib of an adjacent plate, said movable plates alternately arranged relative to the 30
fixed plate, a shifting block fixed to the under surface of each movable plate and provided with an opening, a shaft journaled upon said platform, cam blocks fixed to said shaft and movable within the openings of 35
said shifting blocks, a pinion fixed to the shaft, a segment rack projecting from the truck and engaging said pinion.

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

BERTRAM LEROY NEWELL.

Witnesses:

GUY A. ADAMS,
ROY YOUNGBLOOD.