

No. 742,125.

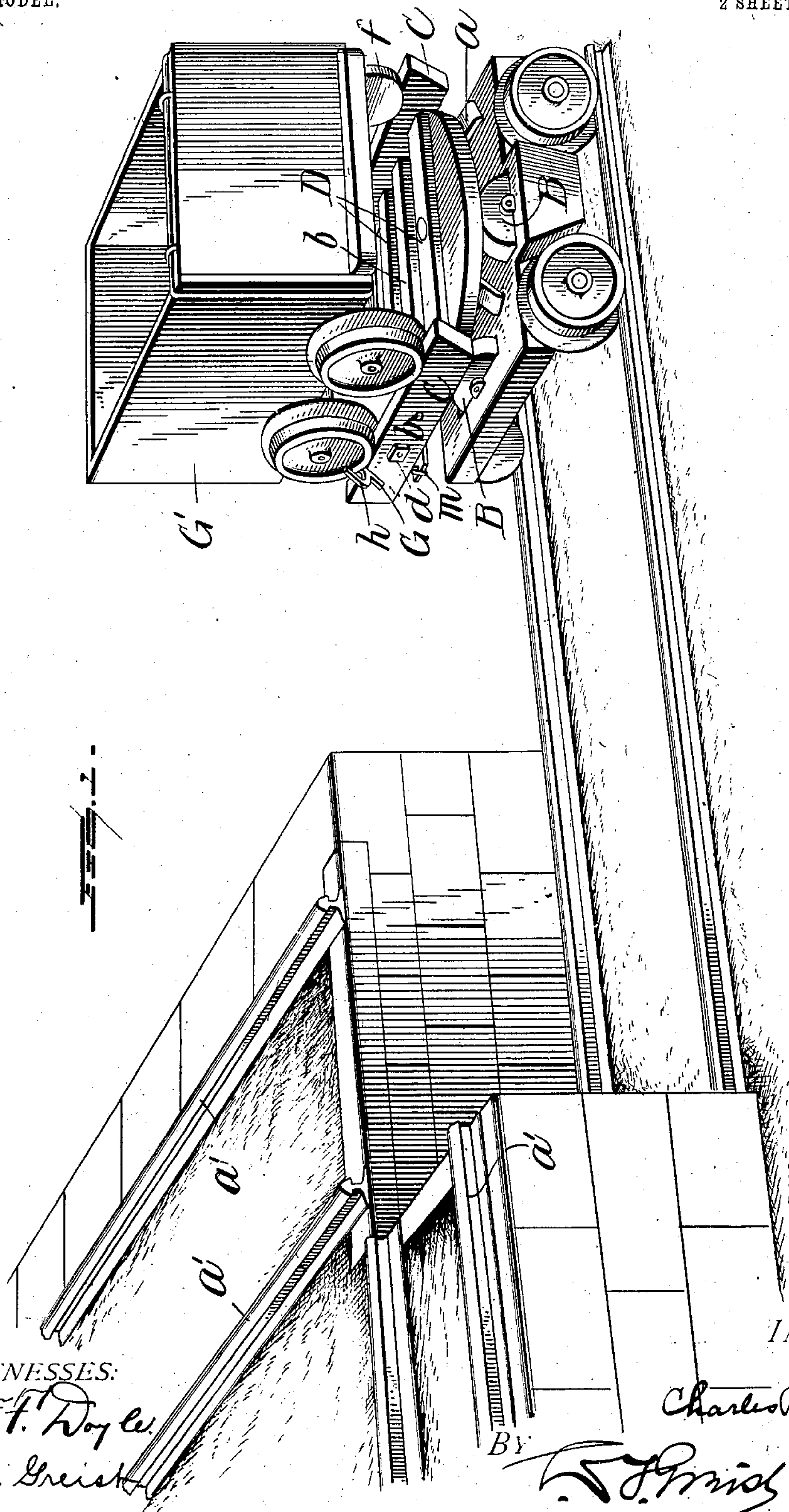
PATENTED OCT. 20, 1903.

C. P. MARTIN.  
UNLOADING APPARATUS.

APPLICATION FILED SEPT. 24, 1901.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

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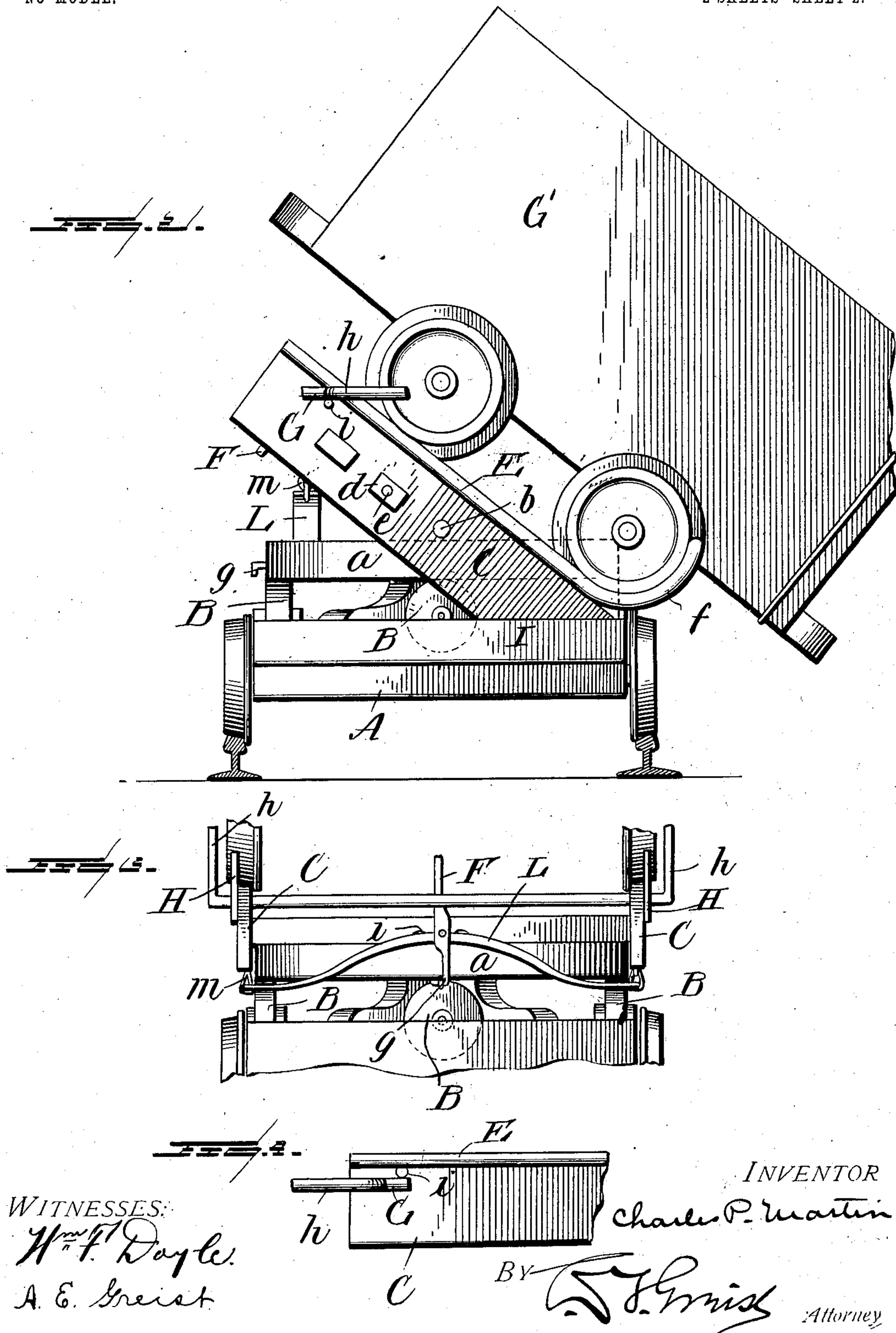
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# UNITED STATES PATENT OFFICE.

CHARLES P. MARTIN, OF LEMONT FURNACE, PENNSYLVANIA, ASSIGNOR OF FIVE-EIGHTHS TO CHARLES H. RHODES, OF HAYDENTOWN, PENNSYLVANIA, AND LANE MARTIN, OF LEMONT FURNACE, PENNSYLVANIA.

## UNLOADING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 742,125, dated October 20, 1903.

Application filed September 24, 1901. Serial No. 76,380. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES P. MARTIN, a citizen of the United States, residing at Lemont Furnace, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Unloading Apparatus; 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.

My invention relates to an improvement in unloading apparatus, and more particularly to means for conveniently and automatically dumping ore-cars, the object of the invention being to provide a simple and efficacious means by which a loaded car can be conveniently and automatically tilted for the purpose of discharging its contents in any desired direction and returned to its normal position.

My invention also has for its object the providing of means whereby ore or coal cars run from a plurality of mining-tunnels or coal-banks can be taken from a common point and dumped in any direction and returned to their respective tracks.

The objects of my invention are attained by the construction illustrated in the accompanying drawings, of which—

Figure 1 is a perspective of my device, showing it ready for operation and showing tracks diverging from a common point. Fig. 2 is a side view of truck, showing car and dumping apparatus in a tilted position. Figs. 3 and 4 are detail views of parts.

In the drawings, A represents an ordinary car-truck with a platform and a turn-table *a* pivoted thereon by means of a bolt run through the center thereof. The turn-table *a* is supported by a plurality of wheels B, set in said truck-platform, as shown.

Attached to the turn-table in any suitable manner is an axletree *b*, upon which a track-section tilts. Said track-section is preferably made of wood or any light material and is composed of side rails C and braces D, which braces rest upon the turn-table *a*, as shown in Fig. 1, thus holding said track-section in a horizontal position. The track-

section is also made more firm and secure by rod *e*, running through the side rails C and secured by nut *d*. Attached to the top of side rails C in any suitable manner are metal rails E, curved at *f*, as shown, so as to form abutments to engage with the front wheels of an ore-car run upon said rails and prevent the car from going forward when the track-section is tilted.

Attached to the rear of the track-section in any convenient manner is hook F, so arranged as to engage with catch *g*, attached to the turn-table *a*. Said hook F when engaged with catch *g* prevents the track-section from tilting before desired.

G is a rod of any desirable material running through holes in the rear of the track-section, as shown, and turned upward at each end to form handles *h*. Attached to or made a part of said rod G and sufficiently near the ends of the track-section on each side to engage with the rear wheels of an ore-car when run upon said track-section are two blocks or abutments H, which when turned upward and toward the car, as shown in the drawings, by handles *h* hold the car from receding from its position on the dumping apparatus. When it is desirable to release the ore-car from track-section C, the abutments or blocks H are turned backward by means of handles *h*, the lower end of the abutments H resting against the ends of rod *i* running through the track-section near the rear thereof and projecting sufficiently to engage with the lower ends of said abutments H, as shown in the drawings.

Ore-car G', which is provided with a swinging end-board, is run upon the track-section from any desired direction, said track-section turning with turn-table *a*, the car-truck A being on a track sufficiently below the grade upon which the ore-car track runs to admit of the ore-cars passing upon said track-section. The ore-cars are then carried to any desired point by means of car-truck A and dumped by disengaging hook F from catch *g* and the tilting of the track-section. By placing said track-section upon axletree *b* at a point in the rear of the center of said track-section so that a larger portion of the track-



section will lie in front of the axletree the same will tilt automatically when hook F is released from catch *g*, and the contents of a car resting upon said track-section can be  
 5 dumped in any direction by means of turn-table *a* and the releasing of said hook F from the catch *g*. The forward end of the track-section when in a tilted position rests upon truck-platform I, as shown in Fig. 2.

10 L is a heavy plate or bow-spring, at its central portion secured at *e* to the rear part of the turn-table, with its downwardly and outwardly extending free ends located below the sides of the track-section at points between  
 15 the rear ends thereof and the horizontal axis on which said section tilts vertically.

*m m* are loose or pivoted connections between the free ends of said spring and the sides C C of the track-section.

20 The arrangement is such that the loaded car will tilt against the tension of said spring, thereby elevating its free ends. When the car is emptied, the power of the spring is sufficient to return the track-section and car to  
 25 the normal horizontal position. Other forms of springs and springs differently applied and applied to different forms of cars and unloading apparatus may be used, and I do not  
 30 wish to be limited to the preferred form described or to the spring applied to the particular unloading car or apparatus instanced.

In the claims I have used the term "carrier" to designate, broadly, the movable portion of my apparatus, including generically  
 35 the track-section and car, as it is obvious that the car or ore-receptacle could, if desired, be made integral with the said movable track-section, the whole being transported together to and from the loading and dumping points.

40 Having thus described my invention, I would refer to patent of the United States, No. 671,025, granted to me April 2, 1901, for the general features of the unloading apparatus herein described and upon which the subject-  
 45 matter of this application is an improvement and addition. I also refer to patent in Great Britain, No. 4,036 of 1901, application for which was made by me on the 25th day of February, 1901.

50 Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. In an unloading apparatus, the combination of a pivotally-mounted movable carrier heavier at the tilting end, and a spring  
 55 for the purpose of returning said carrier to its normal horizontal position.

2. In an unloading apparatus, the combination of a pivotally-mounted carrier heavier at the tilting end, a spring for the purpose of  
 60 returning said carrier to its normal horizontal position, and a catch for holding the carrier in its normal position when returned.

3. In an unloading apparatus, the combination of a tilting carrier heavier at the tilting end, and a returning-spring mounted  
 65 thereon for the purpose of restoring the carrier to its normal position.

4. In an unloading apparatus, the truck, the tilting track-section, the catch, the hook  
 70 and the returning-spring.

5. In an unloading apparatus, the truck, the turn-table, the tilting track-section and returning-spring.

6. In an unloading apparatus, the combination with a car, of a truck, a turn-table  
 75 mounted thereon, a tilting track-section on said table, abutments on said track-section adapted to engage the wheels of said car, means for limiting the movement of the car  
 80 on the track-section and a returning-spring to return said track-section to its normal horizontal position.

7. In an unloading apparatus, the combination with a car, of a truck, a turn-table  
 85 mounted thereon, a tilting track-section on said table, abutments on said track-section adapted to engage the wheels of said car, means for limiting the movement of the car on the track-section, a returning-spring to re-  
 90 turn the track-section to its normal position, and a catch for securing the tilting track-section when returned to its normal position.

In testimony whereof I have signed my name to this specification in the presence of  
 95 two subscribing witnesses.

CHARLES P. MARTIN.

Witnesses:

DANIEL STURGEON,  
 H. F. DETWILER.