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4 SHEETS—SHEET 1.

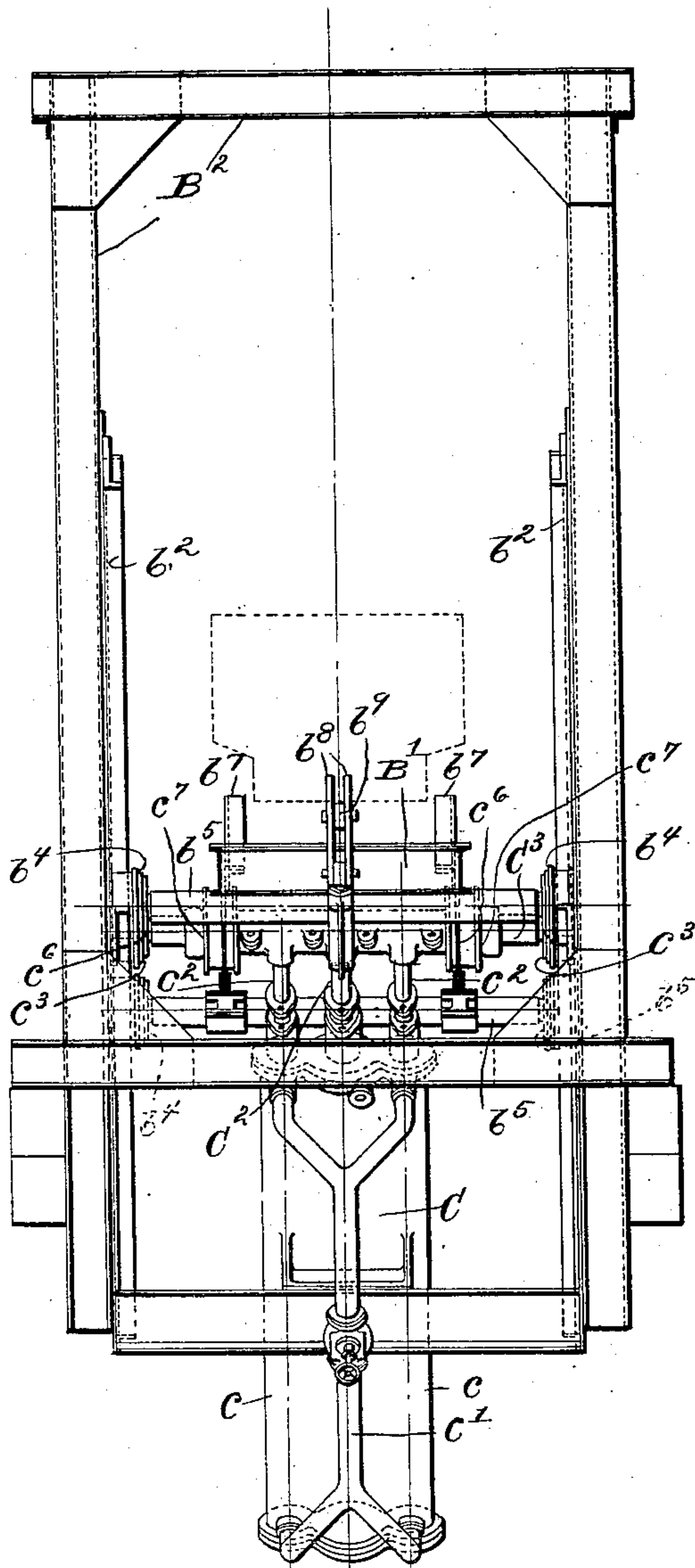


Fig. 1.

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4 SHEETS—SHEET 2.



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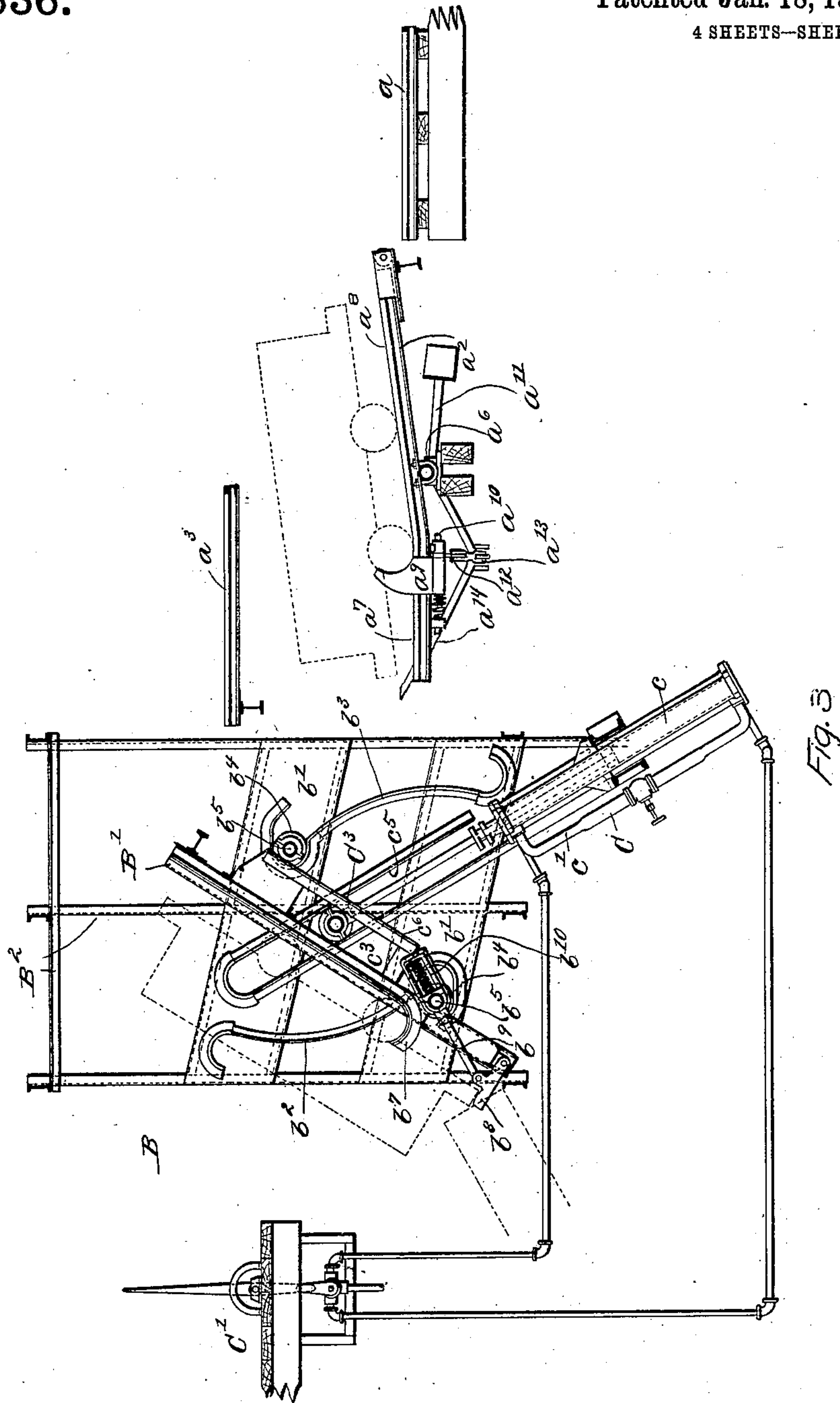
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F. C. GREENE.
CAR DUMPING MECHANISM.
APPLICATION FILED APR. 13, 1908.

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Patented Jan. 18, 1910.

4 SHEETS—SHEET 3.



WITNESSES:
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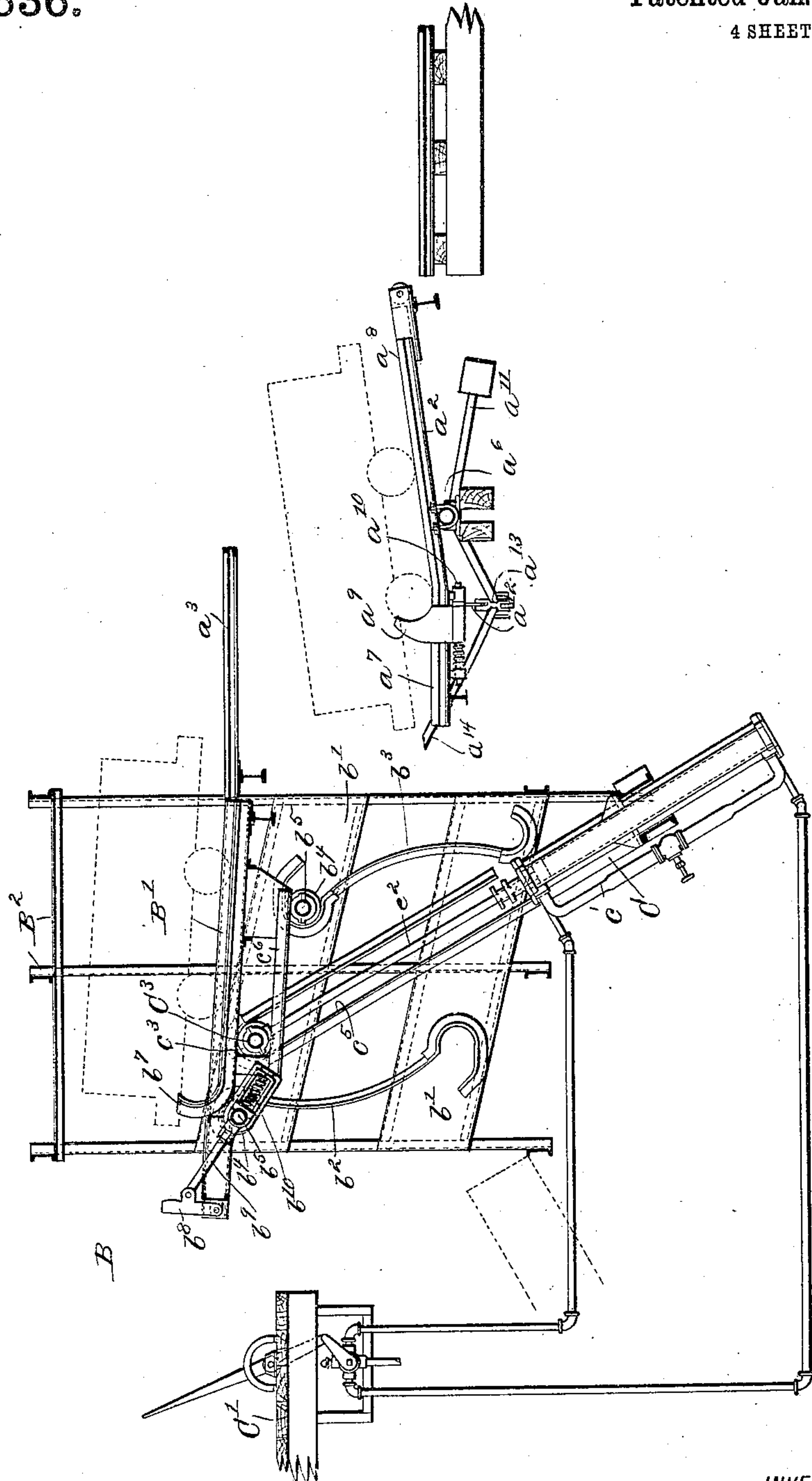
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4 SHEETS—SHEET 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANK C. GREENE, OF CLEVELAND, OHIO.

CAR-DUMPING MECHANISM.

946,636.

Specification of Letters Patent. Patented Jan. 18, 1910.

Application filed April 13, 1908. Serial No. 426,685.

To all whom it may concern:

Be it known that I, FRANK C. GREENE, citizen of the United States, resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Car-Dumping Mechanisms, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

The general class of dumping mechanism to which the device forming the subject-matter of the present application belongs is that designed for use in connection with the dumping of mine cars such as are employed in coal mines and the like; it is not meant, of course, by this to imply a limitation of the invention to such field of use alone. The present device moreover is still more particularly designed for use in conjunction with superposed tipple tracks arranged as in a co-pending application filed December 4, 1905, Serial No. 290,010, for use in connection with a double deck cage in a contiguously located shaft. The dumping mechanism considered by itself belongs to a type of device invented by me and broadly set forth in a co-pending application filed August 15, 1906, Serial No. 330,652. As distinguished, however, from this latter device, as also from the device disclosed in a third application filed February 1, 1908, Serial No. 413,725, the floating track section that is characteristic of all three types of dumping mechanism, is designed normally to register with the lower of the two superposed tracks instead of with the upper, this being a condition that is occasionally met with in installing the car handling mechanism set forth in the first application above noted. The present application, however, corresponds with the last of the applications above noted in that it has as one of its objects the adaptation of the dumping device proper to power operation, whereby at least certain of the movements may be positively effected and controlled. Incidentally, but by direct coöperation of the dumping mechanism, there is here introduced, as in the application last referred to, a device for controlling the feeding of the cars onto such mechanism, this device being a specific form of the device described, and generically claimed in such last named application.

Having thus set forth the general rela-

tionship of the present invention and the objects sought to be accomplished, the means constituting said invention will hereinafter be fully described and particularly pointed out in the claims.

The annexed drawings and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawings: Figure 1 is a front elevation of a dumping mechanism wherein the several improvements referred to above have been incorporated; Fig. 2 is a part section and a part side elevation of the same, showing in connection therewith the car "spotter", or feeding device, to which allusion has above been made, together with contiguous portions of the two superposed tracks with which such dumping mechanism stands in operative relation and a double deck cage of the kind forming the subject-matter of a co-pending application named in a previous paragraph; in such Fig. 2, the dumping mechanism is shown in its initial operative position; and Figs. 3 and 4 illustrate in similar part section and part side elevation successive operative positions of the device, wherein the car received in the position as shown in Fig. 2 is dumped and finally discharged onto the upper or car discharge track.

The only portion of the general car handling mechanism, referred to above, which has any pertinence to the subject-matter of the present application is illustrated in Fig. 2 of the drawings just described, such portion comprising the upper end A of the shaft and the double deck cage A' operated in said shaft. As has been indicated the respective decks a a' of such cage are adapted in the position of the latter illustrated to register with the inner ends of superposed tipple tracks a^2 a^3 , at the outer end of which is located the dumping mechanism B of primary interest here. Of the two decks of the cage, the lowermost a is arranged to be so inclined that, when the cage is in the position shown, it is adapted to discharge a loaded car onto the lowermost a^2 of the two superposed tracks, while the upper deck a' simultaneously receives an empty car from the uppermost a^3 of such tipple tracks. The passage of the empty car thus onto the cage is controlled by suitable

stop mechanism a^4 , illustrated diagrammatically only, and operated by the cage coming into proper registering position. A stop a^5 on the lower cage deck is similarly designed to be actuated to release the car resting on such deck. The actual discharge of this car, however, is controlled by the car spotting device that is located intermediately of the shaft and the dumping station, and, in effect, in the case of the apparatus illustrated, constitutes the whole of the lower of the superposed track a^2 ; description of its detailed construction will be deferred until after the dumping mechanism proper has been taken up and considered.

The primary operative element of the latter is a floating track-section B' that is supported in a manner presently to be set forth in a vertically disposed framework B^2 , its normal position being in register with the lower tipple track a^2 , as shown in Fig. 2. Framework B^2 desirably includes in its construction plates b' , arranged on the respective sides of the track-section and provided on their respective inner faces with two guide-ways, b^2 b^3 , in which are held rollers or guide wheels b^4 mounted on the ends of transverse shafts b^5 constituting fixed elements in the track-section aforesaid. The guide-ways b^2 b^3 are conveniently formed by securing appropriately bent sections of angle iron to the inner faces of the plates and corresponding sets of such ways are respectively adapted to engage the two sets of guide rollers b^4 just referred to. These ways are formed on the arcs of circles, the foremost way b^2 , having regard to the direction of discharge, being formed on the arc of a circle that has the upper end of the rearmost way b^3 for a center; while such rearmost way is formed on the arc of a circle that has the lower end of the foremost way for a center. The two ends thus referred to as centers of the respective guide ways are each turned inwardly so as to form pockets in said guide ways adapted to lock the corresponding end of the track section against movement, while the other end thereof travels along the other guide way.

When resting with the guide rolls in the respective lower ends of the corresponding guide ways, the track section B' is designed to aline with the lower car delivery track a that is inclined downwardly thereto at substantially the same angle as has already been stated. Similarly when in its elevated position, such track-section is designed to be alined with the upper car delivery track a^3 , the relative heights of the two guide ways being determined with this in view.

For the purpose of imparting to the track-section the necessary vertical movement to thus position the same alternately in register with the lower and upper of the two super-

posed tracks, power means are provided. These means in the case in hand consist of a fluid pressure cylinder C fixedly mounted so as to incline forwardly from the perpendicular at an angle approximately that illustrated. Such cylinder is connected with a suitable source of fluid pressure supply, preferably steam or compressed air, control of which is had in the usual way and at a station C' either contiguous to the dumping station or removed therefrom, as desired. Associated with cylinder C are two other smaller cylinders c , Fig. 1, one on each side thereof. These latter cylinders are filled with a suitable liquid, as dead oil, the flow of which from one end to the other is regulated by a common pass pipe c' , thereby regulating the movement of pistons c^2 reciprocally mounted in said cylinders and having their upper ends, along with the upper end of a piston C^2 reciprocally mounted in the cylinder C , joined to a cross head C^3 . This cross-head is steadied in its movement by having its ends provided with rollers c^3 held in guide ways c^5 , similar to those wherein rollers b^4 are guided. Such cross-head further has sliding pivotal engagement with the track section B' , to which end brackets c^6 formed with slide-ways are secured on the under side of the track-section, one at each side, wherein rollers c^7 borne by the cross head are held, Fig. 1. It will thus be seen that not only is the track-section bodily reciprocable with the piston as the latter moves up and down, but that it is adapted to oscillate with respect to the latter to tilt first in one direction, and then in the other, according as first one end and then the other is free to move in the guide ways b^2 b^3 .

In order to stop the car as it enters upon the track-section, as also to retain the same thereon pending the tilting movement of the track-section during the dumping operation, the forward ends b^7 of the rails, or angle irons constituting the rails, of the section are turned upwardly as shown, Figs. 2, 3 and 4. It is desirable to avoid, however, the shock that would otherwise be occasioned both the dumping mechanism and the car if the latter were allowed to bump directly into such fixed stop. Accordingly a resiliently supported secondary stop b^8 is provided forwardly of the curved rail ends b^7 just described, and so located with reference to the same as to engage the front end of the car body just prior to engagement between the wheels of the car and the fixed stop. Such secondary stop comprises simply a pivotally mounted buffer normally positioned in the manner indicated by means of a rod b^9 pivotally connected thereto and to the forward guide shaft b^5 , a spring b^{10} being interposed to allow the desired movement to take place.

As has been stated, the lower a^2 of the two superposed tracks constitutes at the

same time a car spotting device that regulates the passage of cars from the lower deck *a* of the cage in the shaft so as automatically to place successive cars in position to be received onto the floating track section *B'* of the dumping mechanism proper. Such spotting device comprises simply a tilting track-section supported upon a transverse shaft *a⁶* and bent in a vertical plane so as to present two portions *a⁷* *a⁸* respectively adapted in different positions of the section to register with the lower deck of the cage and with the floating track section. When portion *a⁷* is thus in register with track section *B'*, portion *a⁸* is raised sufficiently to act as a stop thereby preventing the entrance of a car onto the lower track even though it be released from the stop *a⁵* on the cage deck. Similarly, a car after being received onto the tilting section is normally prevented from being discharged onto section *B'* by horns *a⁹* mounted upon longitudinally disposed, resiliently supported, rock-shafts *a¹⁰* adapted to engage with the treads of the car wheels. Such horns are thus normally positioned by means of a counterweighted lever *a¹¹* secured to the under side of the tilting track section and connected with the respective rock shafts by means of inwardly directed arms *a¹²* and links *a¹³*. This same counterweighted lever is adapted to normally maintain the tilting track section in position to receive a car from the cage. Its forward end *a¹⁴*, which is free, projects in such normal position slightly above the front end of the section so as to be engaged simultaneously with such end by the floating track-section *B'* of the dumping mechanism as such last named track-section comes into register with the tilting track-section of the spotting device. The former is thus effective both to move the tilting track section into its second position and to render the stop thereon inoperative as will be obvious.

The operation of the mechanism above described should be quite obvious from the foregoing description of the construction of its several component parts and taken in connection with the full illustration in Figs. 2, 3, and 4 of the drawings of its several intermediate positions. The loaded cars are received one by one onto the spotting device from the lower deck of the cage as shown in Fig. 3 and there held pending the return of the floating track section of the dumping mechanism into register therewith as shown in Fig. 2, in which position the discharge of another car from the cage is prevented. Registration of the floating track-section with the tilting track-section of the spotting device permits the discharge from the latter of the car held thereby. Suitable actuation of power means *C* thereupon tilts the rear end of the track section

upwardly about the forward guide shaft as an axis until the position illustrated in Fig. 3 is attained; immediately after which the rear guide shaft, becoming in turn fixed, movement of the forward shaft begins and the track section is raised into its full elevated position wherein the car, now empty, glides off across the short intervening track *a³* onto the upper deck of the cage.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any one of the following claims or the equivalents of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:—

1. In mechanism of the class described, the combination with a reciprocable member, of a track-section having sliding pivotal connection therewith.

2. In mechanism of the class described, the combination of a reciprocable member, a track-section having sliding pivotal connection therewith, and means adapted to oscillate said track-section pending the reciprocation of said member.

3. In mechanism of the class described, the combination of a reciprocable member, a track-section having sliding pivotal connection therewith, and means adapted to independently control the movement of the respective ends of said track-section upon reciprocation of said member.

4. In mechanism of the class described, the combination of a reciprocable member, a track-section having sliding pivotal connection therewith, and a relatively fixed guide-way engaging said track-section and adapted to oscillate the same upon reciprocation of said member.

5. In mechanism of the class described, the combination of a reciprocable member, a track-section having sliding pivotal connection therewith, and two relatively fixed guide-ways respectively engaging said track-section at points on opposite sides of its pivotal axis and adapted to oscillate the same upon reciprocation of said member.

6. In mechanism of the class described, the combination of a reciprocable member, a track-section having sliding pivotal connection therewith, and corresponding guide-means on each side of said track-section, each such means including two ways of oppositely directed curvature respectively engaging said track-section on opposite sides of its pivotal axis.

7. In mechanism of the class described, the combination of a reciprocable member, a track-section having sliding pivotal connection therewith, and corresponding guide-means on each side of said track-section, each such means including two curved ways re-

spectively engaging said track-section on opposite sides of its pivotal axis and having their concave sides directed toward each other.

5 8. In mechanism of the class described, the combination of a reciprocable member, a track-section having sliding pivotal connection therewith, and corresponding guide-
10 means on each side of said track-section, each such means including two ways respectively engaging said track-section on opposite sides of its pivotal axis, said ways being formed on arms of circles respectively having the upper and the lower end of the other way
15 for centers.

9. In mechanism of the class described, the combination of a reciprocable member, a track-section having sliding pivotal connection therewith, and corresponding guide-
20 means on each side of said track-section, each such means including two ways respectively engaging said track-section on opposite sides of its pivotal axis, the foremost of said ways, having regard to the direction of
25 discharge, being formed on the arc of a circle having the upper end of the rearmost way for a center, and the last-named way being formed on the arc of a circle having the lower end of the foremost way for a
30 center.

10. In mechanism of the class described, the combination of a reciprocable member, a track-section having sliding pivotal connection therewith, and corresponding guide-
35 means on each side of said track-section, each such means including two ways respectively engaging said track-section on opposite sides of its pivotal axis, the foremost of said ways, having regard to the direction
40 of discharge, being formed on the arc of a circle having the upper end of the rearmost way for a center, and the last-named way being formed on the arc of a circle having the lower end of the foremost way for a center, such upper and lower ends being turned
45 inwardly so as to form pockets adapted to lock the corresponding end of said track-section against movement while the other end thereof travels along the other guide-
50 way.

11. In mechanism of the class described, the combination with a reciprocable track-section, of corresponding guide-means on each side thereof for oscillating the same
55 pending its reciprocation, each such means including two ways of oppositely directed curvature respectively engaging said track-section at longitudinally separated points.

12. In mechanism of the class described, the combination with a reciprocable track-section, of corresponding guide-means on each side thereof for oscillating the same
60 pending its reciprocation, each such means including two curved ways respectively engaging said track-section at longitudinally

separated points and having their concave sides directed toward each other.

13. In mechanism of the class described, the combination with a reciprocable track-section, of corresponding guide-means on
70 each side thereof for oscillating the same pending its reciprocation, each such means including two ways respectively engaging said track-section at longitudinally separated points, said ways being formed on arcs
75 of circles respectively having the upper and the lower end of the other way for centers.

14. In mechanism of the class described, the combination with a reciprocable track-section, of corresponding guide-means on
80 each side thereof for oscillating the same pending its reciprocation, each such means including two ways respectively engaging said track-section at longitudinally separated points, the foremost of said ways, having
85 regard to the direction of discharge, being formed on the arc of a circle having the upper end of the rearmost way for a center, and the last-named way being formed on the arc of a circle having the lower end of the
90 foremost way for a center.

15. In mechanism of the class described, the combination with a reciprocable track-section, of corresponding guide-means on each side thereof for oscillating the same
95 pending its reciprocation, each such means including two ways respectively engaging said track-section at longitudinally separated points, the foremost of said ways, having regard to the direction of discharge, being
100 formed on the arc of a circle having the upper end of the rearmost way for a center, and the last-named way being formed on the arc of a circle having the lower end of the foremost way for a center, such upper and
105 lower ends being turned inwardly so as to form pockets adapted to lock the corresponding end of said track-section against movement while the other end thereof travels along the other guide-way.
110

16. In mechanism of the class described, the combination of a reciprocable member, power means for reciprocating the same, and a track-section oscillatorily supported on
115 said member by a sliding pivotal connection.

17. In mechanism of the class described, the combination of a reciprocable member, power means for reciprocating the same, a track-section oscillatorily supported on said
120 member by a sliding pivotal connection, and means adapted to oscillate said track-section upon reciprocation of said member.

18. In mechanism of the class described, the combination with two superposed tracks, the lower track inclining toward, and the
125 upper track from, the dumping station; of a floating track-section normally registering with said first track and movable into register with said second track, said track-section being adapted to incline in opposite direc-
130

tions to correspond with the inclination of said tracks, respectively.

19. In mechanism of the class described, the combination of two superposed tracks, the lower track inclining toward, and the upper track from, the dumping station; a floating track-section normally registering with said first track; and power means adapted to move the same into register with said second track, said track-section being adapted to incline in opposite directions to correspond with the inclination of said tracks respectively.

20. In mechanism of the class described, the combination of two superposed tracks, the lower track inclining toward, and the upper track from, the dumping station; a floating track-section normally registering with said first track; power means adapted to elevate the same into register with said second track, said track-section being adapted to incline in opposite directions to correspond with the inclination of said tracks respectively; and means adapted to oscillate said track-section, pending its elevation, to discharge the contents of a car resting thereon.

21. In mechanism of the class described, the combination of two superposed tracks, the lower track inclining toward, and the upper track from, the dumping station; a floating track-section normally registering with said first track; power means adapted to elevate the same into register with said second track, said track-section being adapted to incline in opposite directions to correspond with the inclination of said tracks respectively; and means adapted to independently control the movement of the respective ends of said track-section pending its elevation, whereby it is oscillated so as to discharge the contents of a car resting thereon.

22. In mechanism of the class described, the combination of two superposed tracks, the lower track inclining toward, and the upper track from, the dumping station; a floating track-section normally registering with said first track and movable into register with said second track, said track-section being adapted to incline in opposite directions to correspond with the inclination of said tracks, respectively; a fixed, fluid-pressure cylinder; and a piston adapted to be reciprocated thereby and having sliding pivotal connection with said track-section, whereby the latter may be elevated into register with the upper of said tracks.

23. In mechanism of the class described, the combination of two superposed tracks, the lower track inclining toward, and the upper track from, the dumping station; a floating track-section normally registering with said first track and movable into register with said second track, said track-section being adapted to incline in opposite

directions to correspond with the inclination of said tracks, respectively; a fixed, fluid-pressure cylinder; a piston adapted to be reciprocated thereby and having sliding pivotal connection with said track-section, whereby the latter may be elevated into register with the upper of said tracks; and means adapted to oscillate said track-section pending its elevation, to discharge the contents of a car resting thereon.

24. In mechanism of the class described, the combination of two superposed tracks, the lower track inclining toward, and the upper track from, the dumping station; a floating track-section normally registering with said first track and movable into register with said second track, said track-section being adapted to incline in opposite directions to correspond with the inclination of said tracks, respectively; a fixed, fluid-pressure cylinder; a piston adapted to be reciprocated thereby and having sliding pivotal connection with said track-section, whereby the latter may be elevated into register with the upper of said tracks; and means adapted to independently control the movement of the respective ends of said track-section pending its elevation, whereby it is oscillated so as to discharge the contents of a car resting thereon.

25. In mechanism of the class described, the combination of two superposed tracks, the lower track inclining toward, and the upper track from, the dumping station; a floating track-section normally registering with said first track and movable into register with said second track, said track-section being adapted to incline in opposite directions to correspond with the inclination of said tracks, respectively; a fixed, fluid-pressure cylinder; a piston adapted to be reciprocated thereby and having sliding pivotal connection with said track-section, whereby the latter may be elevated into register with the upper of said tracks; and means adapted to independently control the movement of the respective ends of said track-section pending its elevation, whereby it is oscillated so as to discharge the contents of a car resting thereon, such means comprising two relatively fixed guide-ways respectively engaging said track-section on opposite sides of its pivotal axis.

26. In mechanism of the class described, the combination of two superposed tracks, the lower track inclining toward, and the upper track from, the dumping station; a floating track-section normally registering with said first track and movable into register with said second track, said track-section being adapted to incline in opposite directions to correspond with the inclination of said tracks, respectively; a fixed, fluid-pressure cylinder; a piston adapted to be reciprocated thereby and having sliding pivotal connection

tion with said track-section, whereby the latter may be elevated into register with the upper of said tracks; and corresponding guide-means on each side of said track-section adapted to independently control the movement of the respective ends of the latter pending its elevation, each such means including two ways of oppositely directed curvature respectively engaging said track-section on opposite sides of its pivotal axis.

27. In mechanism of the class described, the combination of two superposed tracks, the lower track inclining toward, and the upper track from, the dumping station; a floating track-section normally registering with said first track and movable into register with said second track, said track-section being adapted to incline in opposite directions to correspond with the inclination of said tracks, respectively; a fixed, fluid-pressure cylinder; a piston adapted to be reciprocated thereby and having sliding pivotal connection with said track-section, whereby the latter may be elevated into register with the upper of said tracks; and corresponding guide-means on each side of said track-section adapted to independently control the movement of the respective ends of the latter pending its elevation, each such means including two curved ways respectively engaging said track-section on opposite sides of its pivotal axis and having their concave sides directed toward each other.

28. In mechanism of the class described, the combination of two superposed tracks, the lower track inclining toward, and the upper track from, the dumping station; a floating track-section normally registering with said first track and movable into register with said second track, said track-section being adapted to incline in opposite directions to correspond with the inclination of said tracks, respectively; a fixed, fluid-pressure cylinder; a piston adapted to be reciprocated thereby and having sliding pivotal connection with said track-section, whereby the latter may be elevated into register with the upper of said tracks; and corresponding guide-means on each side of said track-section adapted to independently control the movement of the respective ends of the latter pending its elevation, each such means including two ways respectively engaging said track-section on opposite sides of its pivotal axis, said ways being formed on arcs of circles respectively having the upper and the lower end of the other way for centers.

29. In mechanism of the class described, the combination of two superposed tracks, the lower track inclining toward, and the upper track from, the dumping station; a floating track-section normally registering with said first track and movable into register with said second track, said track-section

being adapted to incline in opposite directions to correspond with the inclination of said tracks, respectively; a fixed, fluid-pressure cylinder; a piston adapted to be reciprocated thereby and having sliding pivotal connection with said track-section, whereby the latter may be elevated into register with the upper of said tracks; and corresponding guide-means on each side of said track-section adapted to independently control the movement of the respective ends of the latter pending its elevation, each such means including two ways respectively engaging said track-section on opposite sides of its pivotal axis, the foremost of said ways, having regard to the direction of discharge, being formed on the arc of a circle having the upper end of the rearmost way for a center, and the last-named way being formed on the arc of a circle having the lower end of the foremost way for a center.

30. In mechanism of the class described, the combination of two superposed tracks, the lower track inclining toward, and the upper track from, the dumping station; a floating track-section normally registering with said first track and movable into register with said second track, said track-section being adapted to incline in opposite directions to correspond with the inclination of said tracks, respectively; a fixed, fluid-pressure cylinder; a piston adapted to independently control the movement of the respective ends of the latter pending its elevation, each such means including two ways respectively engaging said track-section on opposite sides of its pivotal axis, the foremost of said ways, having regard to the direction of discharge, being formed on the arc of a circle having the upper end of the rearmost way for a center, and the last-named way being formed on the arc of a circle having the lower end of the foremost way for a center, such upper and lower ends being turned inwardly so as to form pockets adapted to lock the corresponding end of said track-section against movement while the other end thereof travels along the other guideway.

31. In mechanism of the class described, the combination with a discontinuous track, of means for controlling the passage of cars therealong, such means comprising an interposed tilting track-section adapted in one position to receive a car from one portion of said track and in another position to discharge such car onto the other portion thereof, said track-section serving, when in such last-named position, as a stop for cars on such first track portion, means controlling the discharge of a car from said track-section, and means adapted normally to maintain said track-section in such first position and said last named means operative.

32. In mechanism of the class described, the combination with a discontinuous track, of means for controlling the passage of cars therealong, such means comprising an interposed tilting track-section adapted in one position to receive a car from one portion of said track and in another position to discharge such car onto the other portion thereof, said track-section serving, when in such last-named position, as a stop for cars on such first track portion, an independently operable stop on said track-section for controlling the discharge of a car therefrom, and counterweight means adapted normally to maintain said track-section in such first position and said stop operative.

33. In mechanism of the class described, the combination with a discontinuous track, of means for controlling the passage of cars therealong, such means comprising an interposed tilting track-section adapted in one position to receive a car from one portion of said track and in another position to discharge such car onto the other portion thereof, said track-section serving, when in such last-named position, as a stop for cars on such first track portion, a movable stop on said track-section for controlling the discharge of a car therefrom, and a counterweighted lever connected with said stop and tending both to render the same operative and to maintain said track-section in such first position.

34. In mechanism of the class described, the combination of a car delivery track, a movable track-section and means for controlling the passage of cars from said track to said track-section, said means comprising an interposed tilting track-section adapted in normal position to receive a car from said

track and in another to discharge the same onto said first track-section, said tilting track-section serving, when in such last-named position, as a stop for cars on said track, an independently operable stop on said tilting track-section for controlling the discharge of a car therefrom, and means tending both to maintain said track-section in normal position and to render said stop operative, said first track-section being effective, on coming into register with said tilting track-section, to render said stop inoperative.

35. In mechanism of the class described, the combination of a car delivery track, a movable track-section, and means for controlling the passage of cars from said track to said track-section, said means comprising an interposed tilting track-section adapted in normal position to receive a car from said track and in another to discharge the same onto said first track-section, said tilting track-section serving, when in such last-named position, as a stop for cars on said track, a movable stop on said tilting track-section for controlling the discharge of a car therefrom, and a counterweighted lever connected with said stop and tending both to render the same operative and to maintain said tilting track-section in normal position, said first track-section being adapted, on coming into register with said tilting track-section, to engage said lever, thereby rendering said stop inoperative.

Signed by me this 25th day of March, 1908.

FRANK C. GREENE.

Attested by:

O. V. GREENE,

JNO. F. OBERLIN.