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Aug. 25, 1925. 1,550,754

G. F. SOCKMAN

RAILWAY CAR TRANSFERRING APPARATUS

Filed March 5, 1925 3 Sheets-Sheet 1

Fig. 1.

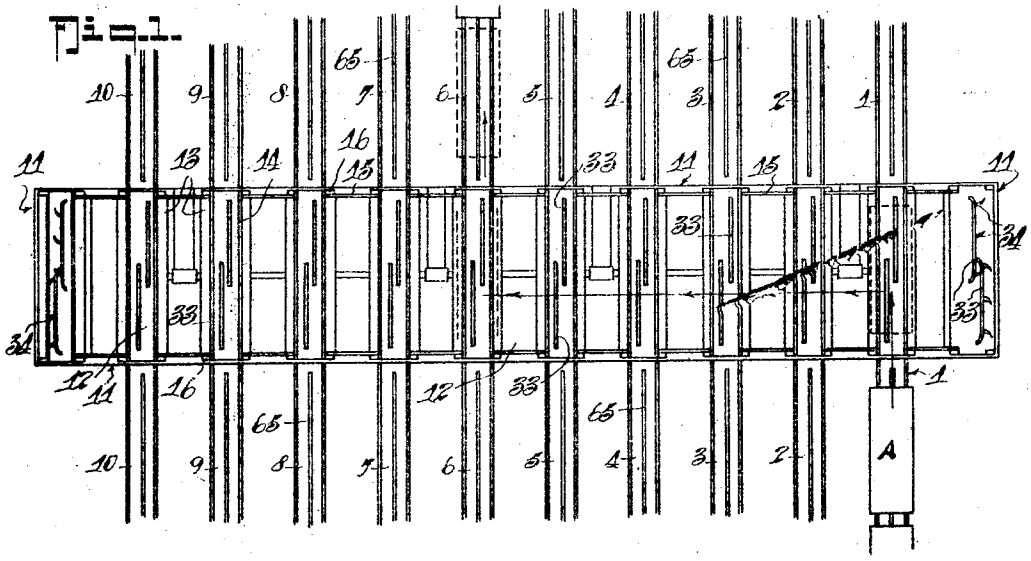


Fig. 4.

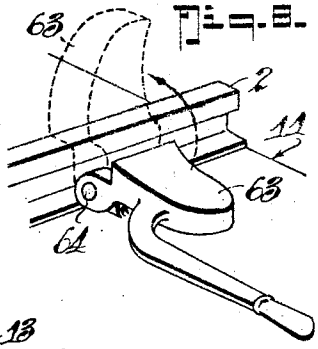


Fig. 5.

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RAILWAY CAR TRANSFERRING APPARATUS

Filed March 5, 1925 3 Sheets-Sheet 2

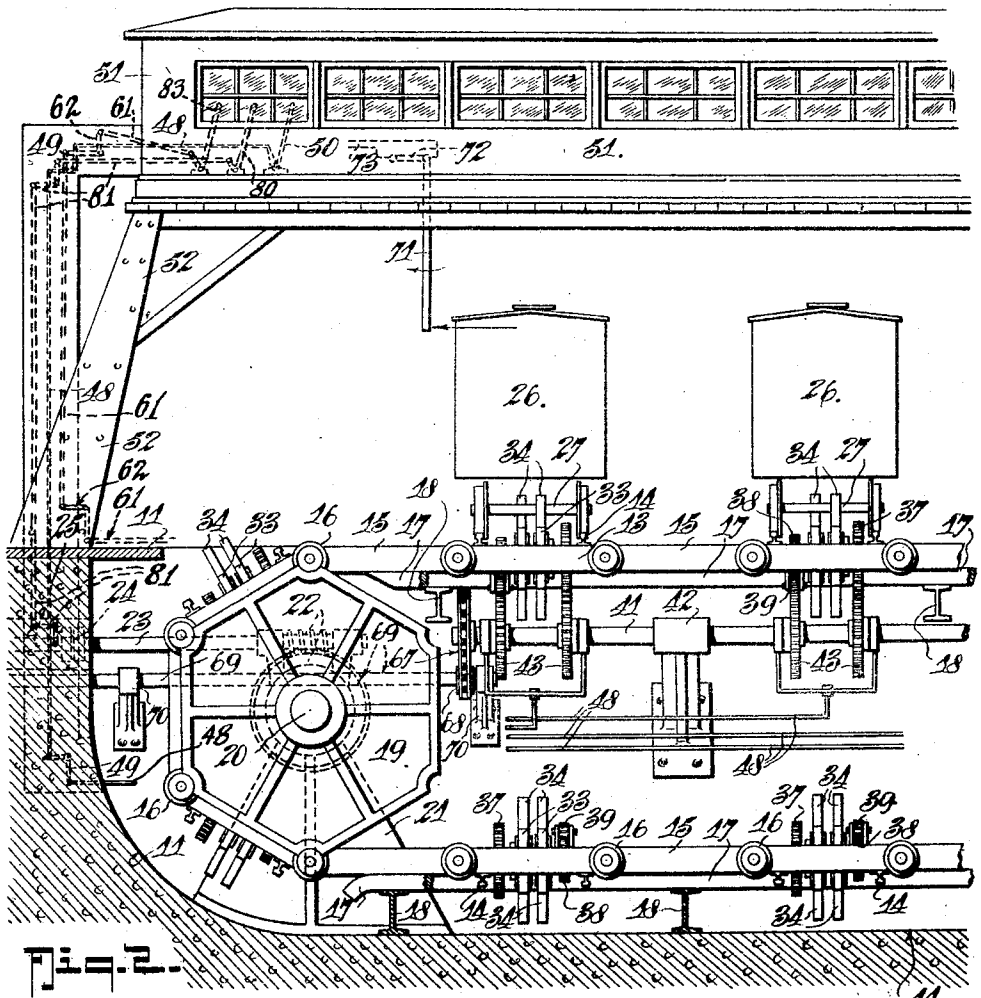


Fig. 2.

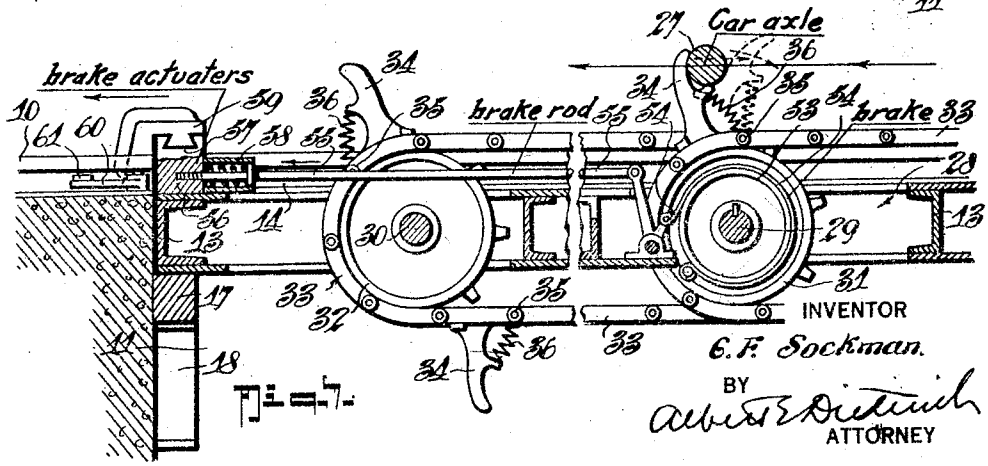


Fig. 7.

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RAILWAY CAR TRANSFERRING APPARATUS

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Fig. 2.

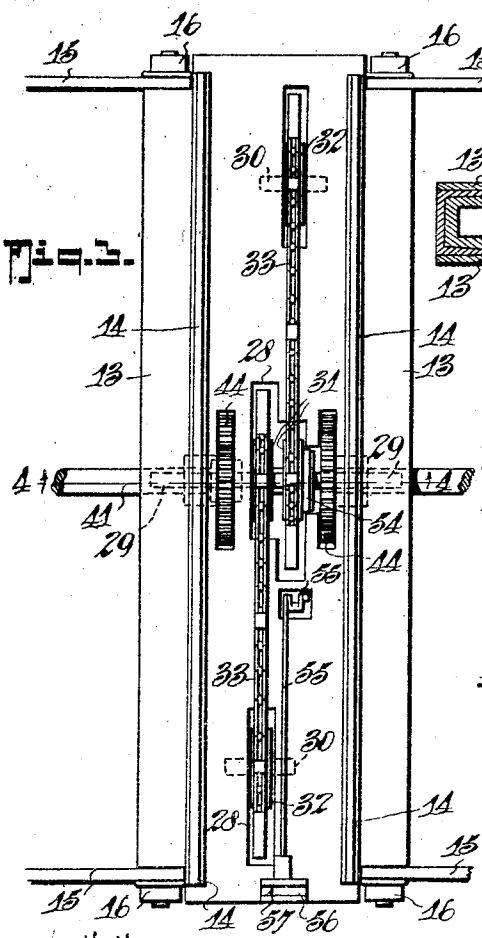


Fig. 4.

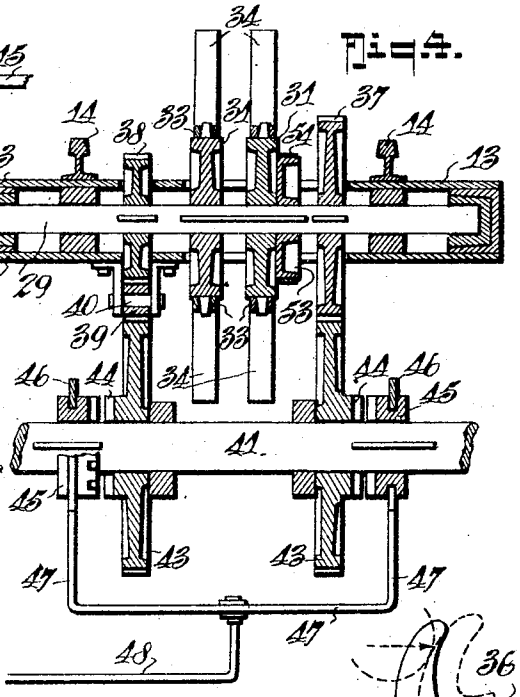
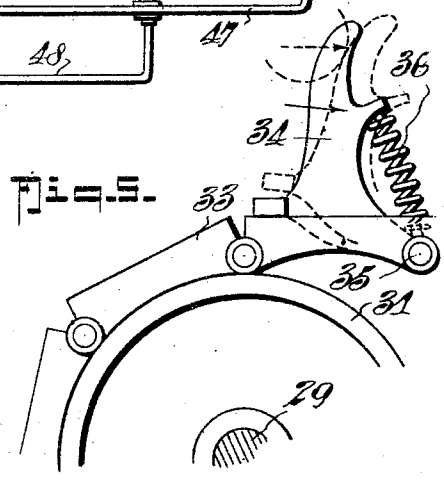


Fig. 5.



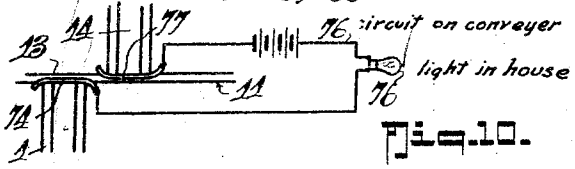
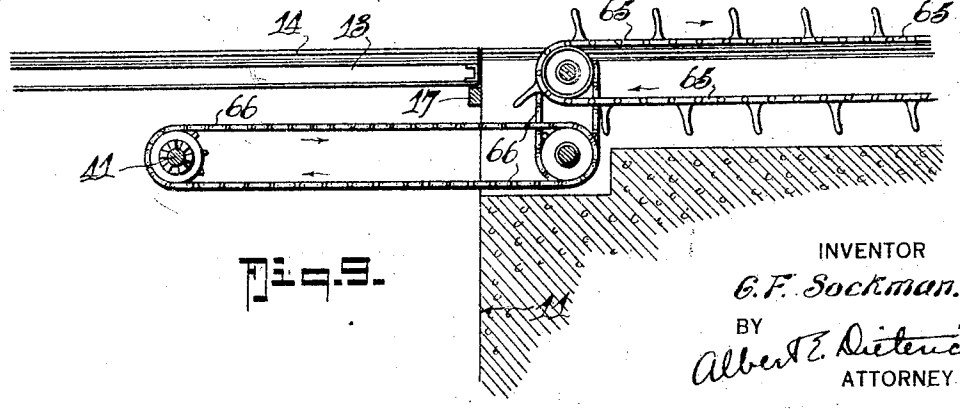


Fig. 10.

Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE F. SOCKMAN, OF WOODLAWN, PENNSYLVANIA.

RAILWAY-CAR-TRANSFERRING APPARATUS.

Application filed March 5, 1925. Serial No. 13,287.

To all whom it may concern:

Be it known that I, GEORGE F. SOCKMAN, a citizen of the United States, residing at Woodlawn, in the county of Beaver and State of Pennsylvania, have invented a new and Improved Railway-Car-Transferring Apparatus, of which the following is a specification.

The invention generally relates to railroading and has for its object to provide a new and improved apparatus for laterally transferring railway-cars in a simple and effective manner rendering possible the making up of trains in a small fraction of the time at present consumed in that operation and the elimination of the necessity of numerous employees and the risk of life and personal injury damages incident to present methods necessitating wholesale employment and risk of life.

In the present backing and switching systems of making up trains much waste of time, labor and yard space is occasioned, also much loss of life, and it is to remedy these inefficiencies that my invention is designed.

Therefore, in its more detailed nature, my invention seeks to provide a simple and effective car transferring apparatus consisting of an endless platform conveyor of car carrying units movable laterally across the trackways of the yard for the purpose of quickly transferring a car or cars moved thereupon from a certain track or tracks of the yard to a certain other selected track or tracks of said yard, means being also provided whereby the car transferring action may be conveniently observed and controlled by a single operator from a more or less remotely positioned observation and control room.

The invention also comprehends the provision of means for imparting a brake or cushioning action to the cars as they are moved upon the conveyor and for imparting impetus to said cars when they have been moved to the selected track or tracks to effect their removal from the conveyor platform and movement to their respective train sections.

The invention still further has for its object to provide means for controlling the speed of movement of the cars as they are forced off the conveyor platforms in a manner effectively preventing damage by collision.

With the above and other objects in view that will hereinafter appear, the invention still further resides in those novel details of construction, combination and arrangement of parts, all of which will be first fully described, then be particularly pointed out in the appended claims, reference being had to the accompanying drawings, in which:—

Figure 1 is a diagrammatic plan view illustrating the invention in use.

Figure 2 is a somewhat diagrammatic vertical longitudinal section of one end of the platform conveyor, a pair of cars being shown carried thereby.

Figure 3 is a plan view of a conveyor platform unit.

Figure 4 is a cross section thereof taken on the line 4—4 on Figure 3.

Figure 5 is a detail side elevation of a section of one of the car movement controlling and throw-off chains.

Figure 6 is an enlarged plan view of the brake actuator connections.

Figure 7 is a somewhat diagrammatic longitudinal section illustrating the manner of brake actuation.

Figure 8 is a detail view of one of the hand thrown safety stop dogs.

Figure 9 is a somewhat diagrammatic detail section illustrating the means for controlling the speed of the cars after they have been thrown off the conveyor platforms onto the selected track.

Figure 10 is a diagrammatic view illustrating a means of signalling to the operator when the tracks of the conveyor or platforms and those of the yard are in register.

In the disclosure of my invention I have here made the numerals 1 to 10 inclusive indicate the trackways of a railroad yard, see Figure 1. It will be understood, of course, that this illustration is merely diagrammatic and the tracks illustrated are to be taken merely indicative of a railroad yard which may be provided with any number of such trackways to meet the traffic requirements of the particular point.

I provide the yard with a conveyor pit 11 which extends transversely across all of the trackways 1–10 at right angles thereto in

the manner indicated in the said Figure 1 and in Figure 2 of the drawings.

In the pit 11 is mounted an endless conveyor equipped with tracks and adapted for receiving cars of trains being broken up and for transferring such cars to other selected ones of the trackways 1–10 to greatly facilitate the making up of trains on such selected trackways. The cross conveyor is built up of platform units 13 each having a track section 14 adapted to be brought into register with such of the trackways 1–10 of the yard as may be determined, and link units 15 which are adapted to join all of the platform units 13 to form the conveyor into an endless chain in the manner indicated in Figure 2 of the drawings. The platform units 13 are each provided with a bearing wheel 16 at each corner thereof adapted to roll upon upper and lower supporting tracks 17 suitably supported upon the studding 18 projected from the side walls of the pit 11. The conveyor is thus supported throughout the straightaway upper cross travel and lower return travel, and at each end the said conveyor passes over a set of star wheels 19 mounted on the cross shaft 20 which have suitable bearing as at 21 in the pit 11. One set of star wheels may be in the nature of idlers and the other set thereof may be power driven in any suitable manner. For the purpose of illustration I have shown a worm and worm wheel drive 22, the drive shaft 23 of which may be suitably clutch-equipped, as at 24, to a main drive shaft section 25 so that the movement of the cross conveyor may be continued or discontinued at will for the purpose of properly bringing the track sections 14 into register with those 1–10 of the yard. I have diagrammatically indicated a control lever 80 mounted in the tower 51 and which may be utilized, with the aid of suitable connections 81, to effect operation of the clutch 24 for the purposes specified.

In the illustration shown in Figure 2, a pair of railway cars is generally indicated at 26 and the axles of the cars at 27.

As will be observed by reference to Figure 3 of the drawings each platform unit 13 is provided with cutout portions 28, the purpose for which will later appear, a central cross shaft 29 and an end shaft section 30 adjacent each end thereof. The shaft 29 and shaft sections 30 are provided with suitable bearings in the platform body at points approximately midway the depth of the platforms.

The central shaft 29 is equipped with a pair of approximately centrally disposed chain receiving sprockets 31 which are keyed to that shaft to rotate therewith and each shaft section 30 has a single chain receiving sprocket 32, each thereof being adaptable to cooperate with one of the sprockets 31 of the central shaft in receiving a car movement control and throwoff chain 33. Each such chain is provided with a plurality of car engaging fingers or hooks 34 adapted to engage a portion of the car when moved upon or when it is to be removed from the platform for the purpose of retarding such onward movement or for causing movement in effecting such removal in a manner later to be described. It will be obvious from the foregoing that the cutout portions 28 are provided to permit the necessary positioning and movements of the shaft sections and their equipments.

As will be observed by reference to Figure 5 of the drawings, each of the hooks or fingers 34 with which the chains 33 are equipped are rule joint hinged to the said chains, as at 35, so that the said devices will provide a fixed abutment when engaged in one direction but will be permitted to collapse when engaged in an opposite direction, for a purpose later to be described. Suitable spring devices 36 are provided and serve to hold the finger or hook devices 34 to their normal extended positions.

Each central shaft 29 of the platform units 13 is also equipped with a direct drive gear 37 and a reverse direction gear 38, both of which are keyed to the said shaft to cause the same to rotate when they are rotated and, for cooperating with the reverse direction gear 38, a reversing idler 39 is provided and is mounted upon a suitable stud shaft 40 having suitable bearing carried by the platform 13 so as to always hold the said idler 39 in mesh with the reverse direction gear 38 in a manner for projecting its lowermost point on the same horizontal plane with that of the brake drive gear 37 for a purpose soon to be described.

A common actuator shaft 41 is mounted in the pit centrally thereof below and adjacent the upper line of cross travel of the conveyor and which said shaft is mounted in suitable bearings 42 which may be secured to the side walls of the pit 11.

The common actuator shaft 41 extends across the pit 11 approximately the whole of its length or a distance sufficient to take in all of the trackways 1–10 with which the yard is equipped and at the position of each such trackway the said shaft is provided with a pair of large loosely mounted gears 43, which such gears, because of the mounting as stated, are normally idle, while the shaft 41 is kept in continuous rotation in a manner later described.

Each gear 43 is provided at its outside face with a clutch head 44 and a clutch device 45 is splined to the shaft 41 in position for being slid inwardly to oppose the particular cooperative face for the purpose of causing that particular gear to rotate with the shaft 41 and each pair of clutch

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devices has connected therewith a ring shifter 46, both said ring shifters being connected together as at 47 to move in unison so that when one of the clutch devices 45 is moved into engagement with its cooperating clutch head 44 the other of such clutch devices will be moved away from its cooperative clutch head 44, and the parts are so positioned that when the connection 47 is shifted centrally both such clutch heads will be in neutral or out of engagement with the gears 43. In this manner the control devices may be shifted to a neutral position in which none of the clutch devices will coengage and the gears 43 will be in their normal or idle condition, in one direction to cause one of the clutches to engage the proper gear 43 to cause the same to rotate and effect a reverse directing chain movement through the gear connections 39 and 38, or in the opposite direction to cause rotation of the other gear 43 to effect a direct chain movement through the gear connection 37.

All of the connector devices 47 may be joined, by the actuator rods 48 and bell crank levers 49 with suitable control levers 50 in the conveniently positioned observation and control room tower 51 which, in the disclosure here made, is shown as supported as at 52 to straddle the yard across the pit 11. I have shown these mechanical means of shifting the clutch devices merely as one means of operating the same, it being understood that any other shifting devices may be employed that are found practical and desirable. It will be obvious also that the clutch devices 24 may be similarly shifted as has hereinbefore been described.

Each central shaft 29 of the platform units 13 is also provided with a brake drum 53 around which takes a suitable brake band 54, one end of which is free and the other end of which is fixed in the usual manner. A brake rod 55 is secured to the free end of the brake band so that when the said rod is moved longitudinally it will serve to apply the brake band to the drum to effect a braking action on the central shaft 29 or to release such action, according to the direction in which that rod is moved.

A dove tail grooved head 56 is secured to one end of each platform 13 in the manner indicated in Figures 3, 6 and 7, the dove tail groove thereof being indicated at 57. The head 56 is spring held as at 58 to the brake release effecting or normal position and is secured to the extended end of the brake rod 55 so that when the said head is pulled longitudinally it will effect a braking action and when released will be spring returned to its normal position to release such braking action.

A head mover 59 having a dove tail portion adapted to slide into engagement with the dove tail groove of the head 56, as a particular platform 13 moves into register with a slotted yard trackway, is provided. The mover 59 is connected to the actuator lever 60, said lever being pivoted and the said mover being slidably mounted so that when the said lever 60 is mechanically actuated through the actuator rod connection 61 and bell crank devices 62 and the control lever 83 mounted in the remote tower 51, the said mover will effect longitudinal movement of the head 56 with which it is in engagement and apply braking action as above indicated.

Each yard trackway may be provided with a safety stop dog 63 pivoted as at 64 in cooperative position therewith at each side of the cross conveyor and which is so pivotally mounted as to adapt the same for being hand thrown to the operative condition for acting as a safety device for stopping a car which, by carelessness of an operator, might be allowed to run off that side of the cross conveyor opposite its direction of movement. The use of such device is, of course, optional only and is merely a safe-guard in a disclosure where it is unnecessary if the operator of the apparatus is alert.

Each yard trackway 1–10 may also be equipped with a centrally disposed hook equipped chain 65 similar in construction to those with which each platform is equipped and which is driven and controlled as at 66 from the common actuator shaft 41. The purpose of this equipment is to engage a portion of the car which is thrown off the cross conveyor onto the selected yard trackway and to retard and control the speed of movement of that car along that trackway according to the speed of rotation of the said shaft 41.

It will be understood, of course, that the common actuator shaft 41 may be power driven in any manner suitable according to the particular installation or yard equipment as, for example, by equipping the same with a large sprocket 67 through which and the chain connection with the small sprocket 68 rotation may be imparted from the driven shaft 69 having suitable bearing as at 70 along one wall of the pit 11.

In operation, assuming that it is desired to move car A from track 1 over into position for facilitating its connection with a train being made up on track 6, the operator in the tower 51 would effect a clutching in to start lateral movement of the cross conveyor through the connections 22—23—25 so as to bring the nearest one of the platform units 13 into position for having the trackway 14 thereof register with the said trackway 1 of the yard when the car A, after being uncoupled from its train, would be given a suitable impulse for effecting a

movement of the same onto the said trackway. As the car rolls onto the trackway 14 the axle thereof or some other suitable abutment, will come into engagement with one of the hook devices of the chain 33 at the advance end of the platform and thus cause the chain to move, causing rotation, of course, of the central cross shaft 29 of the platform. At a suitable time, governed by observation from the tower room 51, the operator would effect actuation, through the control connections 61 and 62, of the brake actuating devices 59 and 56 for applying a braking action to the drum 54 and thus effectively retarding and stopping movement of the car at the proper time for perfectly positioning the same on the said platform 13.

This being accomplished, the operator would again set the conveyor into motion and cause the same to continue across the pit 11 until the trackway 14, carrying the car A, would come into register with trackway 6, when the operator would shift the clutch connector 47 in a manner for clutching into rotative relation with the actuator shaft 41, that one of the gears 43 which meshes with the direct drive gear 37, thus causing the hook devices of the chain 33 to engage with the axle of the car and impart movement thereto for removing the car from the platform on to the registering trackway 6. After the removal of the car has been effected, the clutch devices will again be moved to the neutral position and such further operations continued as may be necessary to transfer other cars.

It will be understood, of course, that by shifting the clutch devices 44 in one direction, movement will be transmitted for forcing the car off one end of a particular conveyor platform 13 while movement of those clutch devices in the opposite direction will cause movement of the reversing gear connections and effect movement of the car off the opposite end of the said platform according to the needs incident to the manner of making up the particular trains. It will also be understood that as a car axle passes over the hooks 43 of the chain other than that which is effecting movement of that car those hooks will collapse to permit such movement of the car and then again spring up to their normally projected position.

It will also be understood that as a car is thrown off a trackway 14 by a platform unit 13 and onto the selected one of the yard trackways an axle thereof will come into engagement with one of the hooks of the controller chain 65 with which that trackway is equipped and the speed of movement of that car along that trackway retarded according to the speed of rotation of the common actuator shaft 41. By this equipment it will be impossible for the car to pick up added momentum as it proceeds along the trackway and thus eliminate the possibilities of accidents due to collision and such as are common in the present practice of free shunting action of the cars by means of impetus imparted thereto by a backing train or the assistance of a yard "hump."

In the foregoing description, I have disclosed an apparatus by the use of which it is possible to transfer cars from one trackway laterally across a conveyor to a selected trackway, upon which a train is being made up in a simple and effective manner and in which a great saving of time and labor is effected and with the additional feature of certain safety devices which practically eliminate all possibilities of fatal accidents.

While I have described the means for braking the movement of a car onto a platform unit 13 from the operator's compartment 51, it should be understood, of course, that this braking action may be performed by a simple lever device at the side of the track by an attendant who may be accompanying the car being transferred. Such an arrangement is diagrammatically indicated in Figure 6. It will also be understood that while I have indicated the braking device 53—54 as actuated from the devices 56, 59, etc., located at one end of the platform the last stated actuating device may be duplicated, if desired, at the other end of the platform so as to be operable from both ends.

It should also be understood that the transmission gears or sprockets mounted on the common actuator shaft, and from which power is transmitted to the chains 65, may be equipped with suitable clutch devices which may be controlled similarly to those 45 before described and which will serve to throw a desired chain 65 out of active operation and permit it to run freely when desired as, for example, when the made-up train is to be drawn off and it is desired to draw it off at a speed greater than the chain 65 would ordinarily permit.

As a further safety means, I provide a pivoted lever 71 in position for being engaged by a car on any platform 13 which, by carelessness of an operator, might be permitted to remain thereon and be carried beyond the last track at the side of the yard. That lever may have a crank extension 72 for normally closing an energized circuit 73 connected with whatever source of power is used to operate the main drive shaft section 25. As the car strikes the lever 71 it will, of course, open or break the circuit 73 and stop movement of the conveyor, thereby preventing the possible damage of carrying the car over the end of the conveyor.

Also, if desired, a single track of the yard equipment may be provide with a contact device 74 connected at 75 with a signal de-

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vice 76 mounted in the observation room 51, the said signal being also connected as at 76 with an energized circuit on the cross conveyor. Each set of trackways 14 of the conveyor may be equipped with a contact device 77 connected with the energized circuit so that when the contacts 77 and 74 engage, the signal 76, light or any type of audible signal, will be actuated. The operator may thus know when the tracks 14 of the conveyor platforms and those 1–10 of the yard are in perfect register so that he can stop the conveyor at the proper time.

I also wish it to be understood that I do not desire to be limited to the specific structural details I have disclosed as the invention comprehends such modifications of arrangements and parts as may be necessary, according to the particular yard adaptation necessary, and which come within the scope of the appended claims.

From the foregoing description, taken in connection with the accompanying drawings, it is thought the novel details of construction, manner of operation and advantages of my invention will be readily apparent to those skilled in the art to which it relates.

What I claim is:—

1. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, means for retarding movement of a car onto a platform unit, and means for imparting throw-off movement to the cars to move them onto their selected tracks.

2. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, means for retarding movement of a car onto a platform unit, means for imparting throw-off movement to the cars to move them onto their selected tracks, and means for controlling the conveyor movement, the retarding means, and the movement imparting means from a remote control room.

3. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, means carried by each conveyor platform for retarding movement of a car thereonto, and means positioned adjacent each trackway and with which the platform carried retarding means moves into register and which is adapted to be actuated for effecting the retarding action.

4. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, devices carried by each conveyor platform for retarding movement of a car thereonto and for imparting movement to said car to move it off therefrom, and means for controlling operation of said devices from a remote control room.

5. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, devices carried by each conveyor platform for retarding movement of a car thereonto and for imparting movement to said car to move it off therefrom, means for controlling operation of said devices from a remote control room, the said devices including chains with car engaging hooks thereon.

6. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, devices carried by each conveyor platform for retarding movement of a car thereonto and for imparting movement to said car to move it off therefrom, and means controllable from a remote control room and operable for causing the said devices to function in a desired one of two directions.

7. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, devices carried by each conveyor platform for retarding movement of a car thereonto and for impartment movement to said car to move it off therefrom, means for controlling operation of said devices from a remote control room, the said devices including chains with car engaging hooks thereon, the said hooks being so mounted as to provide fixed abutments when engaged in one direction and for collapsing when engaged in the opposite direction.

8. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, devices carried by each conveyor platform for retarding movement of a car thereonto and for imparting movement to said car to move it off therefrom, means for controlling

operation of said devices from a remote control room, the said devices including a pair of oppositely operable chains having car engaging hooks thereon, and means controllable from a remote control room and operable for causing one only of the chains to operate.

9. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, devices carried by each conveyor platform for retarding movement of a car thereonto and for imparting movement to said car to move it off therefrom, means for controlling operation of said devices from a remote control room, the said devices including a pair of oppositely operable chains having car engaging hooks thereon, means controllable from a remote control room and operable for causing one only of the chains to operate, the said hooks being so mounted as to provide fixed abutments when engaged in one direction and for collapsing when engaged in the opposite direction.

10. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, devices carried by each conveyor platform for retarding movement of a car thereonto and for imparting movement to said car to move it off therefrom, means for controlling operation of said devices from a remote control room, the said devices including a pair of oppositely operable chains having car engaging hooks thereon, means controllable from a remote control room and operable for causing one only of the chains to operate, and means for retarding movement of a car engaged chain to brake the movement of the car onto the conveyor platform.

11. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, devices carried by each conveyor platform for retarding movement of a car thereonto and for imparting movement to said car to move it off therefrom, means for controlling operation of said devices from a remote control room, the said devices including a pair of oppositely operable chains having car engaging hooks thereon, means controllable from a remote control room and operable for causing one only of the chains to operate, means carried by each conveyor platform for retarding movement of a car engaged chain to brake the movement of said platform, and means positioned adjacent each trackway and with which the platform carried retarding means moves into register and which is adapted to be actuated for effecting the retarding action.

12. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, and means for retarding and controlling movement of the transferred cars along the trackways to which they have been transferred.

13. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, and a speed control shaft and car engaging hook carrying chains for retarding and controlling movement of the transferred cars along the trackways to which they have been transferred.

14. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, a speed control shaft and car engaging hook carrying means for retarding and controlling movement of the transferred cars along the trackways to which they have been transferred, the said hooks being so mounted as to provide fixed abutments when engaged in one direction and for collapsing when engaged in the opposite direction.

15. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, means for retarding movement of a car onto a platform unit, means for imparting throw-off movement to the cars to move them into their selected tracks, and means for retarding and controlling movement of the transferred cars along the trackways to which they have been transferred.

16. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, devices carried by each conveyor platform for retarding movement of a car thereonto and for imparting movement to said car to move it off therefrom, means for controlling operation of said devices from a remote control room, the said devices including a

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pair of oppositely operable chains having car engaging hooks thereon, means controllable from a remote control room and operable for causing one only of the chains to operate, means carried by each conveyor platform for retarding movement of a car engaged chain to brake the movement of said platform, and similarly remotely controlled means positioned adjacent each trackway and with which the platform carried retarding means moves into register and which is adapted to be actuated for effecting the retarding action.

17. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, means for retarding movement of a car onto a platform unit, means for imparting throw-off movement to the cars to move them onto their selected tracks, means for controlling the conveyor movement, the retarding means, and the movement imparting means from a remote control room, and a safety device mounted in position for being engaged by a car on a platform unit and associated with the power transmission devices for moving the conveyor, said device being adapted to be engaged by such a car as is carried beyond the last trackway of the plurality of trackways.

18. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, means for retarding movement of a car onto a platform unit, means for imparting throw-off movement to the cars to move them onto their selected tracks, means for controlling the conveyor movement, the retarding means, and the movement imparting means from a remote control room, and means whereby a signal in the remote control room will be actuated when the trackways of the platform units and the plurality of trackways are brought into register.

19. In apparatus of the class described, a conveyor movable laterally across a plurality of trackways, said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways, means for retarding movement of a car onto a platform unit, means for imparting throw-off movement to the cars to move them onto their selected tracks, means for controlling the conveyor movement, the retarding means, and the movement imparting means from a remote control room, means whereby a signal in the remote control room will be actuated when the trackways of the platform units and the plurality of trackways are brought into register, said means including a single contact on one of the plurality of trackways, a contact on each platform unit trackway, an energized circuit, a signal in the control room and connected with that circuit so that when the single contact is engaged by one of the platform trackway contacts the signal will be actuated.

20. In apparatus of the class described; a conveyor movable laterally across a plurality of trackways; said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways; a central shaft carried by each platform unit and having a pair of sprockets, a direct drive gear device and a reverse drive gear device connected therewith; a stub shaft and sprocket adjacent each end of each platform unit; oppositely operable car engaging chains taking over each central and an end sprocket; a constantly moving common actuator shaft extending across all of the trackways beneath the conveyor; and devices upon the actuator shaft as intervals cooperative with the positions of the plurality of trackways, said devices being adapted to engage the gear devices of the platform units to effect movement of the chains of those units for the purposes specified.

21. In apparatus of the class described; a conveyor movable laterally across a plurality of trackways; said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways; a central shaft carried by each platform unit and having a pair of sprockets, a direct drive gear device and a reverse drive gear device connected therewith; a stub shaft and sprocket adjacent each end of each platform unit; oppositely operable car engaging chains taking over each central and an end sprocket; a constantly moving common actuator shaft extending across all of the trackways beneath the conveyor; and devices upon the actuator shaft at intervals cooperative with the positions of the plurality of trackways, said devices being adapted to engage the gear devices of the platform units to effect movement of the chains of those units, and means for controlling the functioning of the devices on the actuator shaft from a remote control room.

22. In apparatus of the class described; a conveyor movable laterally across a plurality of trackways; said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways; a central shaft carried by each platform unit and having a pair of sprockets, a direct drive gear device and a reverse drive

gear device connected therewith; a stub shaft and sprocket adjacent each end of each platform unit; oppositely operable car engaging chains taking over each central and an end sprocket; a constant moving common actuator shaft extending across all of the trackways beneath the conveyor; devices upon the actuator shaft at intervals cooperative with the positions of the plurality of trackways, said devices being adapted to engage the gear devices of the platform units to effect movement of the chains of those units, means for controlling the functioning of the devices on the actuator shaft from a remote control room in a manner for causing one only of the chains to be moved.

23. In apparatus of the class described; a conveyor movable laterally across a plurality of trackways; said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways; a central shaft carried by each platform unit and having a pair of sprockets, a direct drive gear device and a reverse drive gear device connected therewith; a stub shaft and sprocket adjacent each end of each platform unit; oppositely operable car engaging chains taking over each central and an end sprocket; a constantly moving common actuator shaft extending across all of the trackways beneath the conveyor; a plurality of sets of a pair each of loose driver gears mounted upon the common actuator shaft at intervals according to the positions of the plurality of trackways and into register with which the gears of the said central platform units shafts will be moved as the trackways of those units register with said plurality of trackways; and means operable from a remote control room for causing a selected one of the loose gears to rotate with the actuator shaft for the purposes specified.

24. In apparatus of the class described; a conveyor movable laterally across a plurality of trackways; said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways; a central shaft carried by each platform unit and having a pair of sprockets, a direct drive gear device and a reverse drive gear device connected therewith; a stub shaft and sprocket adjacent each end of each platform unit; oppositely operable car engaging chains taking over each central and an end sprocket; a constantly moving common actuator shaft extending across all of the trackways beneath the conveyor, a plurality of sets of a pair each of loose driver gears mounted upon the common actuator shaft at intervals according to the positions of the plurality of trackways and into register with which the gears of the said central platform units shafts will be moved as the trackways of those units register with said plurality of trackways; and alternately operating clutch devices controllable from a remote control room for engaging a selected one of the loose gears to cause a particular chain to be operated or moved to a neutral position for permitting both loose gears of a set to idle for the purposes specified.

25. In apparatus of the class described; a conveyor movable laterally across a plurality of trackways; said conveyor including platform units each having a trackway thereon for receiving a car and transferring it to a selected one of the plurality of trackways; a central shaft carried by each platform unit and having a pair of sprockets, a direct drive gear device and a reverse drive gear device connected therewith; and a brake drum having a brake band associated therewith, means for actuating the brake hand to brake the action of said central shaft when desired, and devices upon the actuator shaft at intervals cooperative with the positions of the plurality of trackways, said devices being adapted to engage the gear devices of the platform units to effect movement of the chains of those units for the purposes specified.

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