Sept. 25, 1962 C. C. GRIFFITHS ET AL 3,055,310

RAILROAD RIP TRACK INSTALLATION

Filed May 12, 1958 3 Sheets-Sheet 1

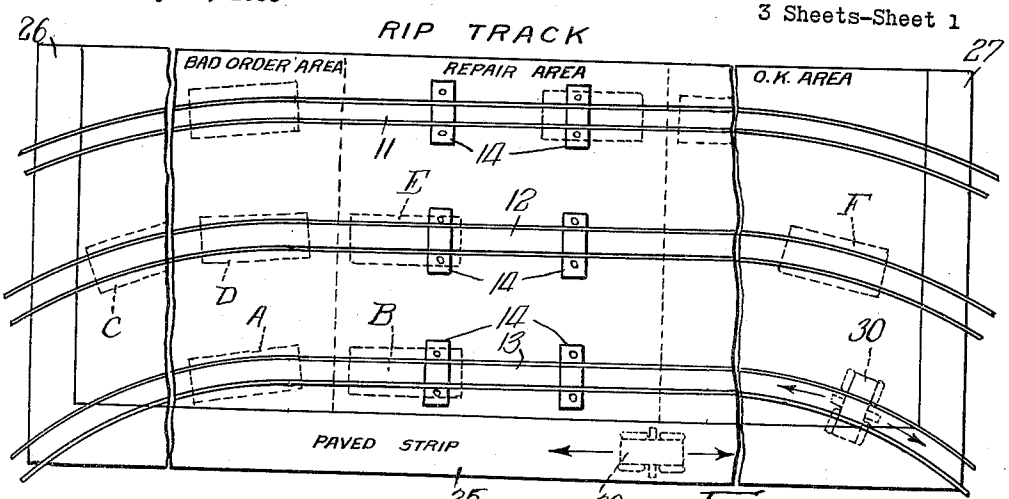


Fig. 1

Fig. 5.

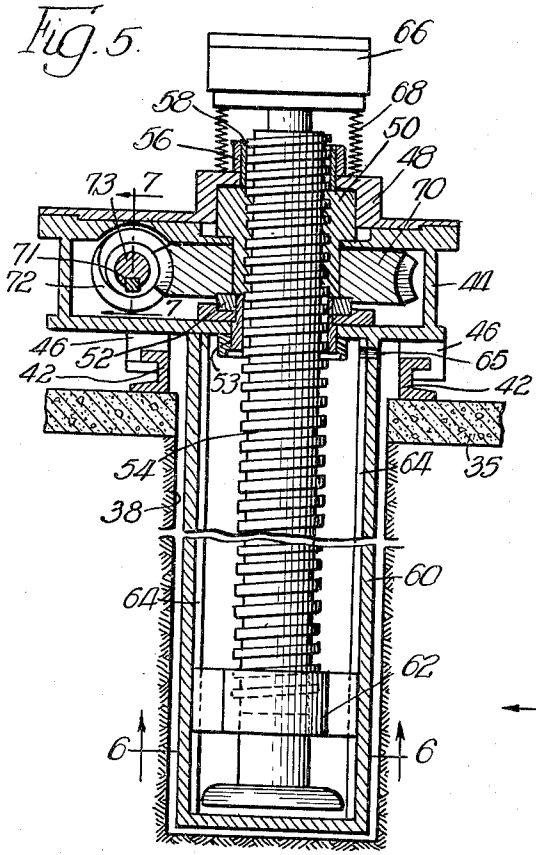


Fig. 6.

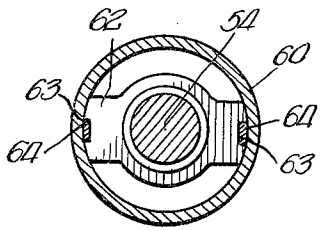
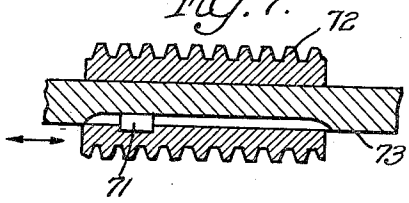


Fig. 7.



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RAILROAD RIP TRACK INSTALLATION

Filed May 12, 1958 3 Sheets-Sheet 2

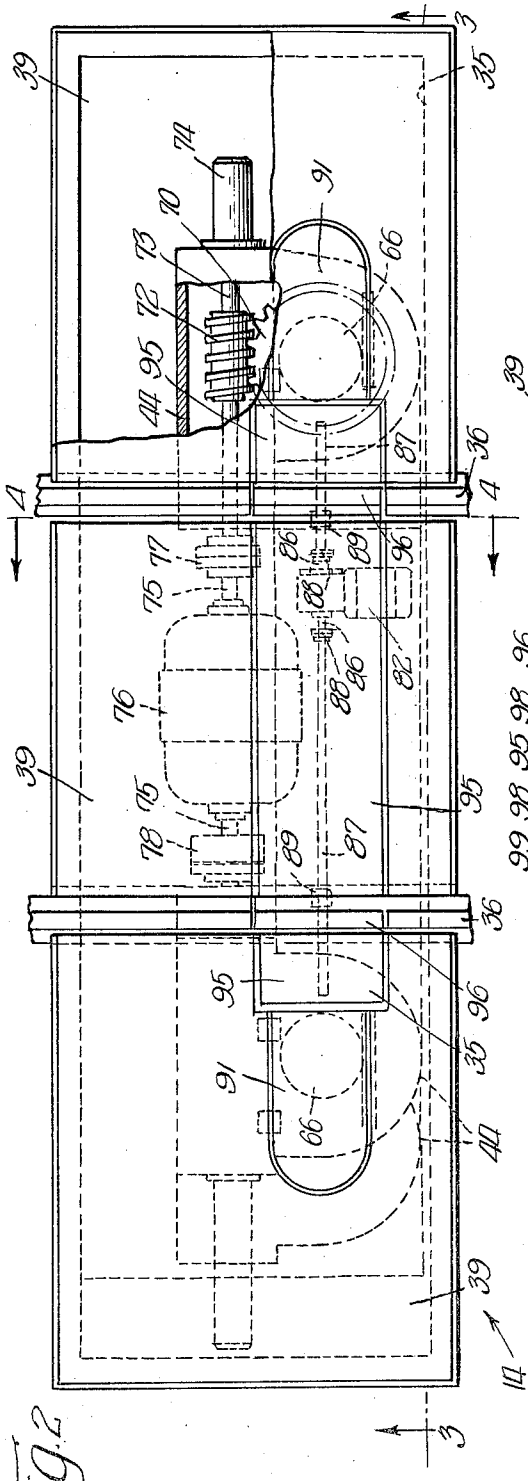

Fig. 2

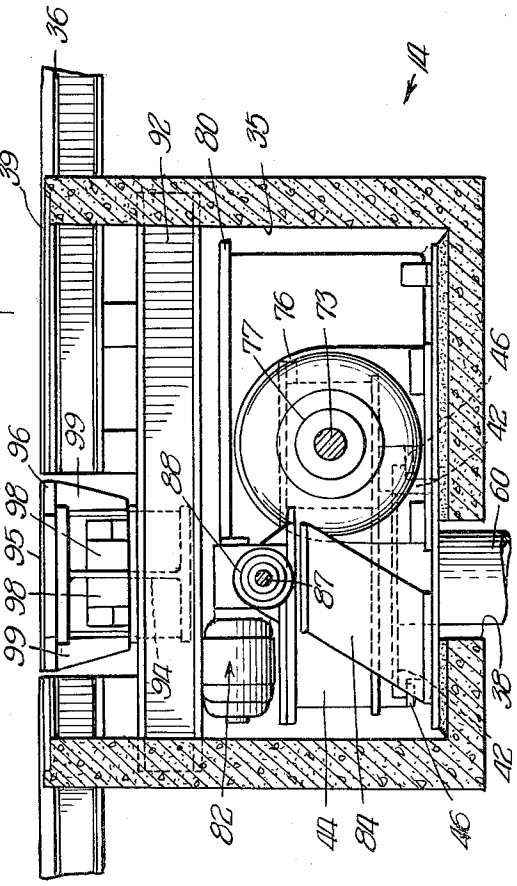

Fig. 4

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RAILROAD RIP TRACK INSTALLATION

Filed May 12, 1958 3 Sheets-Sheet 3

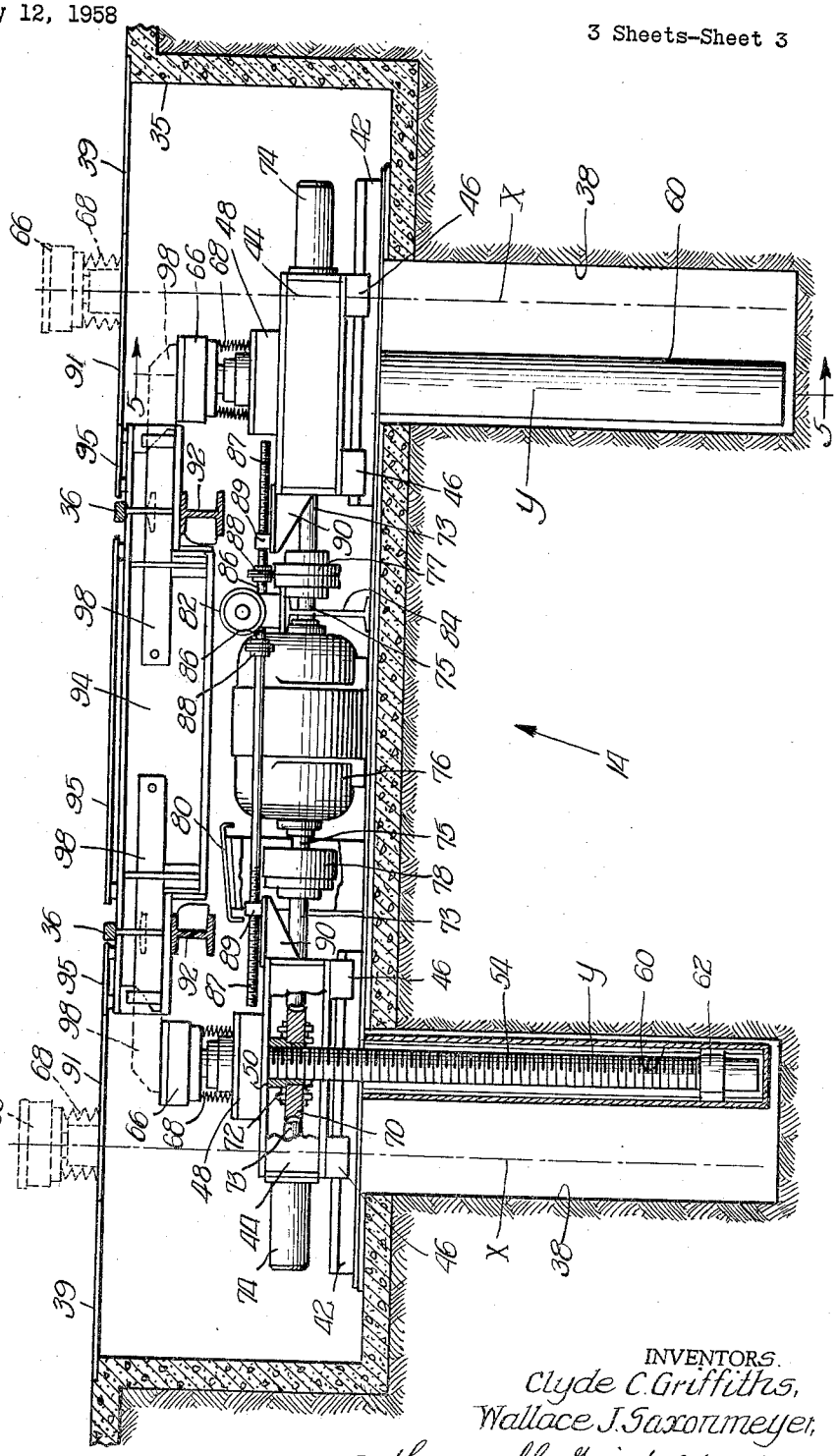

Fig. 3.

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3,055,310

RAILROAD RIP TRACK INSTALLATION

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Filed May 12, 1958, Ser. No. 734,740
9 Claims. (Cl. 104—32)

This invention relates, generally, to improvements and innovations in the construction and operation of so-called railroad rip (repairs in process) tracks.

In the railroad industry the designation "rip track" refers to an area in a railroad yard or the like specifically set aside for the repair of loaded freight cars as distinguished from unloaded cars. When it is discovered that unloaded cars require repairs, they are normally sent to the repair shops. However, mechanical defects often do not show up, or are not discovered, until after a freight car has been loaded and in transit. Obviously, it would be expensive and entail considerable delay to have to unload a defective car and transfer the load onto another car before the cargo can continue its journey. Often the repairs required are of a minor nature and such as may be taken care of in a short time with the proper facilities without unloading a car. It is for the repair of loaded freight cars that a rip track or rip track operation is specifically provided.

While rip tracks as such are by no means new in railroading, they have recently taken on increased importance. This greater attention and emphasis to rip track operations is primarily due to an intensified effort on the part of the railroads to increase their efficiency and give better service to customers, thereby making them more competitive with other forms of transportation such as truck lines and waterways.

The present invention lends itself especially well to rip tracks and the operation thereof, and the increased attention being given to this phase of railroading, from two standpoints. First, the invention results in a substantial improvement and versatility in the repair area of the rip track and the operations that may be performed therein. Secondly, the invention very materially improves the operation of the rip track with respect to the handling of the cars between the so-called "bad-order" area, "repair area" and the "OK" or repaired car area. Hence, as will be clearly brought out hereinafter, the invention pertains not only to certain improvements and innovations in the rip track installations as such, but also in the operation thereof.

After the present invention has been described and illustrated in detail in connection with the accompanying drawings it will be pointed out wherein it offers substantial and important improvements over rip tracks and the operation thereof as they are generally known and operated.

As is well understood in railroading, loaded freight cars requiring repair before they can safely continue to destination, are removed from the train and delivered to the incoming side of a rip track which area is commonly referred to as the "bad order" area. From the bad order area the cars are moved into the middle portion of the rip track which is referred to as the repair area. Since the repairs have to do largely with the car trucks or underframe, jacks are used in the repair area for lifting the cars in various ways and locations. Heretofore these jacks have been movable or portable alongside the track or tracks in the repair area. Once the cars have been repaired they are removed from the repair area into the discharge side of the rip track which is referred to as the "OK" area. Switching engines are used for delivering defective loaded cars to the rip track and for removing them therefrom after they are repaired. Either switch

engines or so-called "car pullers" have heretofore been used for moving and positioning the cars within the rip track.

The present invention provides or incorporates the following basic innovations not previously found in conventional rip tracks:

(1) The jacks are in the form of fixed or permanent installations thereby requiring rather accurate positioning or spotting of the cars in the repair area.

(2) The cars are positioned or manipulated within the rip track by a special type of vehicle which has one set of flanged rail-engaging wheels for use in travelling on the tracks and another set of ground wheels which are used for travelling off the tracks, as on pavement. Such a vehicle is capable of pulling and/or pushing several cars at slow speed and of spotting them accurately with respect to the fixed jack installations. By reason of the set of ground wheels which may be put in operation as required, such a vehicle is free to leave the track and thereby move in and out, in front of and in back of cars, at will.

These and other innovations provided by this invention will be fully described and illustrated in connection with the detailed description set forth below.

Accordingly, the general object of the present invention is the provision of new and improved rip track installations and methods of operating the same.

An important object of the invention is to provide rip tracks with permanently installed car repair positions, preferably with all parts retractable to or below ground level, having manually controlled power jacks which are in fixed position with respect to the length of the tracks extending therethrough.

Another important object of the invention is to provide rip tracks having permanently installed car repair positions as mentioned in the foregoing object and also having a paved strip extending along at least one side of the rip track with paved crossings at opposite ends thereof whereby a special type of traction vehicle capable of travelling alternately on the tracks or on the paved areas may be advantageously used for moving and spotting the cars within the rip track.

Another important object of the invention is a novel method of operating a rip track wherein a special traction vehicle having alternately employed sets of flanged rail-engaging wheels and ground-engaging wheels, is used to move cars in all positions within the rip track and to accurately spot the same with respect to fixed repair positions or stations having power jacks the pads of which may be readily adjusted vertically and laterally with respect to the width of the cars, but which are fixed with respect to the length thereof.

An important object of the invention is the provision of a rip track having permanently installed power jacks the lifting pads of which may be readily adjusted vertically, and laterally in a direction crosswise of the tracks and cars to be repaired, so as to fit and readily accommodate cars of varying widths and design.

Another important object of the invention is the provision in rip tracks of permanently installed power jacks having in addition to the lifting pads having a so-called "center beam" which cooperates with the jack pads and permits lifting of all types of railroad cars including those having only center sills such as certain types of tank cars, and also for lifting the trucks from the bottom so as to permit convenient changing of the brass bearing blocks in the journals of all types of cars.

Still another object of the invention is the provision in a rip track of a permanently installed repair station including power jacks which are conveniently operated by so-called "finger-tip" control to adjust the elevation and lateral spacing or positioning of the jack pads so as to

accurately engage under the special spots or pads where freight cars are designed to be jacked.

Certain other objects of the invention will, in part, be obvious, and will in part appear hereinafter. For a more complete understanding of the nature and scope of the invention reference may now be had to the accompanying drawings wherein:

FIG. 1 is a diagrammatic plan view of a rip track representing one embodiment of the invention and showing, in broken lines, a number of railroad cars spotted in the three areas thereof and two positions of a special type traction vehicle used in moving the railroad cars;

FIG. 2 is an enlarged plan view of one of the repair stations in the rip track shown in FIG. 1 with portions of the floor plate and one of the housings broken away to show the worm and worm gear arrangement;

FIG. 3 is a vertical sectional view taken generally on the line 3—3 of FIG. 2, certain parts being shown in elevation and one of the jack housings being broken away;

FIG. 4 is an enlarged vertical sectional view taken generally on the line 4—4 of FIG. 2;

FIG. 5 is an enlarged vertical sectional view taken generally on the line 5—5 of FIG. 3;

FIG. 6 is a detail horizontal sectional view taken generally on the line 6—6 of FIG. 5; and

FIG. 7 is a detail vertical sectional view taken generally on the line 7—7 of FIG. 5.

In FIG. 1 the rip track is shown with three tracks extending therethrough. It will be understood that it might have only one track or that it might have more than three. However, a three-track installation is typical. As usual, the center area wherein the cars are actually repaired is designated "repair" area. On the left is the so-called "bad order" area into which loaded cars to be repaired are diverted. On the right is the so-called "OK" area occupied by repaired cars until they are picked up for continuance to destination. It will be noted that the tracks entering and leaving the rip track are curved, this being typical as rip tracks are usually "squeezed in" some available space in a railroad yard and not usually planned for in the initial layout of a railroad yard. Each of the tracks **11**, **12** and **13** within the repair area is provided with a pair of spaced permanently installed repair stations, indicated generally at **14**, this having been found to provide a satisfactory arrangement. A paved strip **25** is provided along at least one side of the rip track. Joined to opposite ends of the paved strip **25** are paved crossings **26** and **27**. It will be understood that there may be a paved strip, corresponding to strip **25**, on the opposite side, paved strips between the tracks, and additional crossings, if desired. However, one paved strip **25** and two paved crossings **26** and **27** will usually be sufficient.

Railroad cars may be conveniently and efficiently moved in and between the three areas and accurately spotted at one of the repair stations **14** by means of a lightweight traction vehicle **30** of the special type described in detail in Patents 2,718,195 and 2,718,197. Briefly, such a vehicle is provided with four flanged, rail-engaging wheels and four, retractable ground wheels. The track-engaging wheels are aligned in one direction while the ground wheels are aligned at right angles thereto. Such a vehicle additionally includes means on opposite sides for coupling it to railroad cars and means for assuming a portion of the weight of a railroad car to create sufficient traction of the vehicle on the railroad tracks to permit pushing and/or pulling of the substantially heavier loaded railroad cars along the tracks. A vehicle of this type is marketed commercially under the registered trademark "Trackmobile" by the Whiting Corporation, of Harvey, Illinois.

An illustration of one method of operating the rip track is shown in connection with the lower track **13** in FIG. 1 wherein a loaded railroad car A needing to be repaired has been delivered into and left in the bad order area,

and wherein a railroad car B spotted at a repair station **14** has had a repair job completed. First, the traction vehicle **30** is driven along the paved strip until it straddles the paved crossing **27** of track **13**. Here the ground wheels are retracted so that the vehicle rests on its set of flanged wheels and may be driven along the tracks **13** into coupling engagement with the car B in the repair area. The vehicle **30** then pulls the repaired car B into the OK area where it is uncoupled and left to be picked up and coupled into a train by a switch engine. The vehicle **30** is again moved along the track **13** to the paved crossing **27** where the ground wheels are lowered into supporting engagement with the paved strip so that the vehicle may be driven along the paved strip **25** to the paved crossing **26** of the track **13**. With the vehicle straddling the track **13** the ground wheels are again retracted and the vehicle advanced along the track **13** on its flanged wheels into coupling engagement with the car A which is then pushed into the repair area and accurately spotted at the repair station **14** which was just vacated by the car B.

An illustration of a more complex method of operating the rip track is shown in connection with the middle track **12** in FIG. 1 wherein cars C and D are standing in the bad order area awaiting repair, a car E has been repaired in the left-hand repair station (as viewed in FIG. 1), and a car F is standing in the OK area waiting to be removed. The traction vehicle **30** is first driven along the paved strip until it straddles the paved crossing **27** of the track **12**. It is then moved to the left along the track **12** into coupling engagement with the car F and then farther to the left until car F is coupled to repaired car E. The vehicle **30** is then moved to the right until both cars E and F are pulled into the OK area. The vehicle **30** is then uncoupled from these two repaired cars, transferred to the paved crossing **27** and driven around to the paved crossing **26** of the track **12** where it is transferred to the track **12** and moved to the right into coupling engagement with the car C. The car C is pushed to the right by the vehicle **30** into coupling engagement with the car D whereupon both cars C and D are pushed farther to the right until car D is accurately spotted at the right-hand repair station **14** (as viewed in FIG. 1). The car D is then uncoupled from the car C and the vehicle **30** is moved to the left to pull the car C into proper position relative to the left-hand repair station **14**. The vehicle **30** is then uncoupled from the car C and becomes available for use in switching and spotting cars on tracks **11** and **13**.

It will be understood that the two car shifting operations on the rip track, described above, are only illustrative of its general operation according to the present invention. Other specific operations requiring use of the special vehicle **30** can be readily visualized. It will also be appreciated wherein additional paved crossings might facilitate use of the special traction vehicle. In this connection it should be noted that this vehicle **30** is not limited to movement on paved areas when its ground wheels are down, but that it may travel on unpaved areas and across tracks.

The permanently installed repair stations, indicated generally at **14**, will now be described in detail with particular reference to FIGS. 2 to 6 inclusive. Each repair station **14** includes a generally rectangular pit **35** formed of concrete or the like which extends transversely of the rails or tracks **36**. Adjacent each end the pit **35** is provided with a well **38**, the purpose being for housing the jack screws as will be fully explained hereinafter. The top of the pit **35** is covered over with suitable deck material such as steel floor plate.

Two pairs of spaced, fixed ways **42** (FIGS. 3 and 4) are supported on the bottom of the pit, each pair being adjacent one end thereof. The ways **42** are aligned lengthwise of the pit **35** with the ways of each pair being positioned on opposite sides of the adjacent well **38**. A hous-

ing 44 is disposed in each end of the pit over one of the wells 38 and is provided on opposite sides with a pair of bearing support blocks 46 which are slidable on and interlocked with the fixed ways 42 whereby the housings 44 are slidably mounted on the ways 42 for movement over the wells 38 and transversely of the rails or tracks 36 on which the cars are supported. Obviously, other suitable equivalents can be utilized for mounting the housings 44 for movement in the pit 35 transversely of the rails.

As best shown in FIG. 5, each housing 44 is also provided with a cover 48 and has a vertically disposed nut member 50 supported for rotation therein by means of a thrust bearing 52 of known type and a bushing 53. A jack screw 54 extends vertically through each nut 50 and projects upwardly through an opening in the cover 48 and through a cylindrical screw guide 56 mounted on the cover 48. A guide bushing 58 is disposed within each guide 56 and extends down into the cap portion of each cover 48. Each screw 54 extends downwardly into a cylindrical casing 60 which extends below the housing 44 into one of the wells 38. Each screw 54 is prevented from rotating by means of a yoke member 62 (FIG. 6) which is secured to the lower end of the screw 54 and which has diametrically opposed keyways 63 which slidably engage with vertically extending guides 64 disposed on the interior of the casing 60. Each member 62 thus acts both to guide the bottom end of a screw 54 and to hold it against rotation relative to the casing 60. Desirably each casing 60 is provided with an air vent 65 (FIG. 5) at its upper end. It will be seen that rotation of each nut member 50, depending upon the direction of rotation, causes either a raising or lowering of the associated jack screw 54.

Each screw 54 is provided on the top end with a jack pad 66 mounted thereon in a well known manner for universal movement. A collapsible, accordion-type screw cover 68 (FIG. 3) is preferably provided to protect the portion of each screw projecting above the cover 48 of the housing 44 from dirt or foreign material.

In order to provide a drive means for each of the two jack mechanisms in each pit 35, a worm gear 70 (FIG. 5) is press-fitted on each of the nut members 50. Each worm gear 70 is adapted to be driven by a short worm 72 which is slidably keyed internally by a key 71 (FIG. 7) to a shaft 73 extending through the housing 44 in a direction longitudinally of the pit 35 and with its outer end extending into a casing 74 (FIG. 3) secured to the outer side of the housing 44. One of the worm-carrying shafts 73 is drivingly connected to one end of the drive shaft 75 of an electric motor 76 (supported on the floor of the pit) by means of a coupling 77 of known type. The other worm-carrying shaft 73 is drivingly connected to the other end of the drive shaft 75 of the motor 76 by means of a solenoid controlled, combination brake-wheel and coupling 78 of known type. A housing 80 (FIG. 3) is provided for the solenoid controlled combination brake-wheel and coupling 78. Obviously, both nut members 50 are intended to be rotated upon actuation of the motor 76 in directions adapted to cause either simultaneous upward movement of the screws 54 or simultaneous downward movement thereof. Therefore, inasmuch as the two worm-carrying shafts 73 will be rotated in the same direction by the motor 76, the threads of the two worms 72 are designed and arranged to rotate the two nut members 50 in directions which will provide either simultaneous raising or lowering of the jack pads 66. As the two jack screws 54 are normally threaded in opposite directions, the two worms 72, which are adapted to be driven simultaneously in the same direction by the motor 76, must therefore be oppositely threaded so as to drive the two nut members 50 in opposite directions and provide simultaneous up or down movement of the jack pads 66.

Since the spacing between the jack-engaging spots on

the undersides of freight cars varies, it is necessary that the jack pads 66 be laterally adjustable for engaging the same. In this connection motor means are provided for simultaneously moving the housings 44 along the ways 42 either toward or away from the center of the pit 35. A standard motor and reducing unit, indicated generally at 82 (FIGS. 3 and 4), is supported on a slanted section 84 of an I-beam and has a drive shaft 86 (FIG. 3) extending in opposite directions therefrom longitudinally of the pit 35. A pair of oppositely threaded screws 87 are drivingly engaged with the drive shaft 86 by couplings 88 of known type. Each of the screws 87 extends through a mating nut member 89 carried on a bracket 90 secured to the inner side of each of the housings 44. Upon actuation of the motor 82, the two housings 44 are slidably moved simultaneously either toward or away from the center of the pit 35. The wells 38 are of such a size to accommodate lateral movement of the screw casings 60 therein upon actuation of the motor 82. In FIG. 3, the centerlines *x*—*y* indicate the limits of lateral movement of the two jack screws 54. The worm gears 70 and the worms 72 move with the housings 44 toward and away from the center of the pit 35 upon actuation of the motor 82. The slidable key connections 71 between the worms 72 and the shafts 73 (FIG. 7) permit the worms 72 to move longitudinally relative to the shafts 73. The elongated casings 74 which are carried on the housings 44 and into which the outer ends of the shafts 73 extend accommodate the outer ends of the shafts 73 in both the innermost and outermost positions of the housings 44.

The two motors 76 and 82 may be connected in a circuit including a manual control of a well known type having push buttons so that an operator can control these two motors and thus lateral movement of the housings 44 in the pit 35 and vertical movement of the jack pads 66.

As shown in FIG. 2, a pair of elongated hinged covers 91 are provided in the floor plate 39 above the jack pads 66 so as to uncover the pads 66 when in use.

A majority of freight cars have underframes provided with jacking spots adjacent the opposite ends and on opposite sides thereof whereby they may be engaged by the jack pads 66—66 from the underside so as to lift one end of the car bodies off of the trucks at that end and permit the trucks to be removed and replaced by a new set. However, there are certain types of railroad cars, e.g. certain tank cars, which have no jacking spots at the sides of the underframe which can be engaged by the jack pads 66—66. Such cars have only center sills whereat the car bodies may be lifted safely off of the trucks. In order to permit the lifting of such types of cars having only the center sills whereat they may be lifted or jacked, a center beam 94 is provided which can be raised and lowered by the jack pads 66 as required. The center beam 94 is arranged to engage the center sill of a freight car which has to be lifted at this position. Furthermore, the center beam 94 fills the dual purpose of engaging the underside of the car trucks on opposite sides and intermediate the wheels on all types of freight cars thereby permitting the trucks to be lifted a short distance, an inch or two, and allowing the brass bearing blocks to be removed from the journal boxes and replaced with reconditioned or new brass blocks.

Accordingly, a pair of I-beams 92 (FIGS. 3 and 4) have their ends embedded in the longitudinally extending sides of the pit 35 somewhat below the top of the pit so that the I-beams 92 extend transversely of the pit. The I-beams 92 are spaced apart so as to be vertically aligned with the rails 36. The relatively heavyweight center beam 94, in the form of an I-beam, extends longitudinally of the pit 35 and has a full depth portion disposed between the I-beams 92 and reduced in depth upper end portions extending toward the ends of the pit and normally in supporting engagement on the I-beams 92. As is evident in FIG. 3, the end portions of the center beam

94 terminate just short of the jack pads 66 when the housings 44 are moved laterally into their innermost positions. The portion of the floor plate 39 extending between the hinged cover plates 91 is made up of sections 95 which have been cut out of the main floor plate and which are supported on the center beam 94. Portions 96 are also cut out of the main rails 36 and supported on the center beam 94 by means including gussets 99 (FIG. 4). This arrangement permits the center beam 94 to be raised above the top of the pit 35.

As best shown in FIG. 3, a pair of arms 98 are slidably mounted on each end of the center beam 94, one arm of each pair being disposed on an opposite side of the vertically extending portion of the center beam 94. The arms 98 are mounted for sliding movement longitudinally of the center beam 94 and are adapted to be extended outwardly beyond the ends of the center beam 94 (either manually or by any suitable lever arrangement) into vertical alignment with the jack pads 66 when such pads are in their lowered and innermost positions.

With the arms 98 in their extended positions, as shown in broken lines in FIG. 3, actuation of the motor 76 to raise the jack pads 66 vertically brings the pads into engagement with the undersides of the arms 98 and lifts the center beam 94 and the cutout portions 95 of the floor plate and the cutout portions 96 of the rails 36 supported thereon into lifting engagement either with the center sill of certain type tank cars to permit repair thereof or with the underside of the trucks of all types of cars to permit "changing the brass." During this center beam type lifting operation, the hinge covers 91 will, of course, also be opened automatically.

In operation, after a railroad car of the type having jacking spots on its underframe has been spotted at one of the repair stations 14 in accordance with the general method previously set forth herein, a manual control of any of the well known types is used to actuate the motor 82 to laterally position the jack pads 66 below the jackings spots of the car after which another manual control is utilized to actuate the motor 76 to raise the jack pads 66 into lifting engagement with the underframe of the railroad car. Should the repair problem involve "changing the brass" or should the railroad car requiring repair be a tank car having only a center sill, the arms 98 are first extended into alignment with the lowered jack pads 66 before the lifting motor 76 is actuated. When the motor 76 is actuated the center beam 94 is raised upwardly into lifting engagement either with the center sill of such a tank car or with the underside of the trucks of any car requiring a "change of brass." After the repair operation has been completed, the jack pads 66 are lowered and the repaired car may then be moved into the OK area in accordance with the general method previously described.

Obviously, with the permanently installed type of jack systems disclosed herein, railroad cars requiring repair must be very accurately spotted, e.g. within an inch or two, at the repair stations. Neither switch engines nor car pullers of the conventional cable and winch type are adapted to provide the spotting accuracy possible with the lightweight, self-propelled traction vehicle utilized in the invention. This vehicle is extremely mobile inasmuch as it can readily move back and forth between opposite ends of the rip track system and between the different tracks in the system and is also adapted to both push and pull railroad cars. This vehicle can thus handle car spotting operations in a rip track system that would normally require many switch engines and/or car pullers. Car pullers of the conventional type are additionally unsatisfactory inasmuch as they are not adapted to push cars and are thus limited to pulling operations and inasmuch as they are not adapted to operate with curved tracks.

It is noted that the terms "paved strip" and "paved crossing" used herein are intended to include any of the well known types of road beds commonly in use, such as asphalt, crushed rock, etc. It is further noted that the traction vehicle utilized in the invention may, if necessary, move across railroad tracks without the benefit of any type of road bed as a crossing.

It will be understood that certain changes may be made in the construction or arrangement of the rip track installation and method of operating same disclosed herein without departing from the spirit and scope of the invention as defined in the appended claims.

We claim:

1. In a railroad rip track of the class described, a fixed car jack installation comprising, a pair of jacks disposed on opposite sides of a track in the repair area of the rip track, support means for each of said jacks whereby said jacks may be adjustably shifted in either a loaded or unloaded condition in a direction transverse to said track, said support means providing non-yielding support for said jacks in a vertical direction whereby during a lifting operation said jacks are not vertically movable relative to said support means, and means operably connected to each jack for adjustably shifting said jacks in said transverse direction and for vertically raising and lowering the jack pads thereof whereby said pads may readily be adjusted for lifting engagement under the jacking spots on opposite sides of freight cars wherein there is a variation in the lateral spacing of the jacking spots.

2. In a railroad rip track of the class described a fixed car jack installation comprising, a pair of jacks disposed on opposite sides of a track in the repair area of the rip track and each having a jack pad at the upper end thereof, support means for each of said jacks whereby said jacks may be adjustably shifted in a line transverse to said track, means operably connected to each jack for adjustably shifting said jacks in said transverse line and for vertically raising and lowering the same whereby said jack pads may be readily adjusted for lifting engagement under the jacking spots on opposite sides of freight cars wherein there is a variation in the lateral spacing of the jacking spots from one car to another, a center lifting beam, means for supporting said center beam in a lowered position intermediate said jack pads, and retractable means on opposite ends of said center beam for selective supporting engagement with said jack pads whereby said jacks may be used to lift said center beam.

3. In a railroad rip track of the class described, a fixed car jack installation comprising, a pair of jacks disposed on opposite sides of a track in the repair area of the rip track and each having a jack pad at the upper end thereof, support means for each of said jacks whereby said jacks may be adjustably shifted in a line transverse to said track, one manually controlled motor operably connected to both of said jacks for simultaneously shifting said jacks toward and away from each other in said transverse line, a second manually controlled motor operably connected to both of said jacks for simultaneously raising and lowering said jack pads, a center lifting beam aligned with said jack pads and disposed therebetween, means for supporting said beam in a lowered inactive position, and retractable support means extensible from opposite ends of said beam for lifting engagement by said jack pads, said motors being operable to readily position said jack pads underneath the jacking spots on opposite sides of freight cars of different types, and said second motor being operable for readily lifting said beam when supported by said jack pads.

4. In a railroad rip track of the class described, a fixed car jack installation comprising, an elongated pit emplacement extending transversely to a track in the repair area of said rip track with the top surface of the pit approximately flush with the ground surface, jack support means on the floor of said pit for supporting jacks therein on opposite sides of said track, a pair of screw-type jacks each being non-yieldably mounted on one of said jack support means and having a jack pad on its upper end, interengaging means on said jack supports

and jacks whereby the latter are slidable in a line transverse to said tracks, each of said jacks having a depending screw casing, said pit being provided in opposite ends with wells for receiving said screw casings and accommodating the lateral shifting thereof, which depending screw casings and wells permit said jacks to be lowered to positions wherein the jack pads thereof are disposed below the top surface of the pit, one manually controlled motor unit operably connected to both of said jacks for simultaneously shifting said jacks toward and away from each other in said transverse line, and a second manually controlled motor operably connected to both of said jacks for simultaneously raising and lowering the jack pads of said jacks, whereby said pads may be readily adjusted both laterally and vertically for lifting engagement under the jacking spots on opposite sides of freight cars wherein there is a variation in lateral spacing of the jacking spots.

5. The fixed car jack installation called for in claim 4 wherein each of said jacks comprises a worm and worm gear casing, a jack nut secured in the center of said worm gear, and bearing means for rotatably supporting said nut for rotation on said screw, and wherein said second manually controlled motor unit is operably connected to both of said jacks by means of drive shafts projecting from opposite sides of said unit parallel to said transverse line and through said worms, said worms being slidably keyed to said shafts.

6. The fixed car jack installation as called for in claim 5 wherein said one manually controlled motor is operably connected with said jacks by means of screws projecting on opposite sides thereof in a direction parallel to said transverse line, and a nut is mounted on each of said casings for threaded engagement with one of said screws.

7. In a railroad rip track of the class described, a fixed car jack installation comprising, an elongated pit emplacement extending transversely to a track in the repair area of said rip track with the top surface of the pit approximately flush with the ground surface, jack support means on the floor of said pit for supporting jacks therein on opposite sides of said track, a pair of screw-type jacks each being mounted on one of said jack support means, interengaging means on said jack supports and jacks whereby the latter are slidable in a line transverse to said tracks, each of said jacks having a depending screw casing, said pit being provide in opposite ends with wells for receiving said screw casings and accommodating the lateral shifting thereof, one manually controlled motor unit operably connected to both of said jacks for simultaneously shifting said jacks toward and away from each other in said transverse line, and a second manually controlled motor operably connected to both of said jacks for simultaneously raising and lowering the jack pads of said jacks, a center lift beam disposed between said jacks in alignment with said jack pads thereof, means for supporting said beam in a lowered position, and retractable means extensible from opposite ends of said beam for resting engagement on the adjacent jack pad.

8. The fixed car jack installation called for in claim 7 wherein said center lift beam carries a pair of rail members which when the beam is in its lowered position are flush with and fill gaps provided therefor in said tracks.

9. In combination with a pair of horizontally spaced jack mechanisms having vertically extending screws with lifting pads at the upper ends thereof, a horizontally extending beam extending between the screws with the ends of the beam terminating short of the screws, and a pair of arms one at each end of said beam which are selectively extensible lengthwise of the beam into vertical alignment with the lifting pads of the screws when they are in their lowered positions whereby simultaneous raising of the screws causes engagement of the lifting pads thereof with the undersides of said arms and lifts said beam while maintaining it in its horizontal position.

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