F. W. WALLACE.

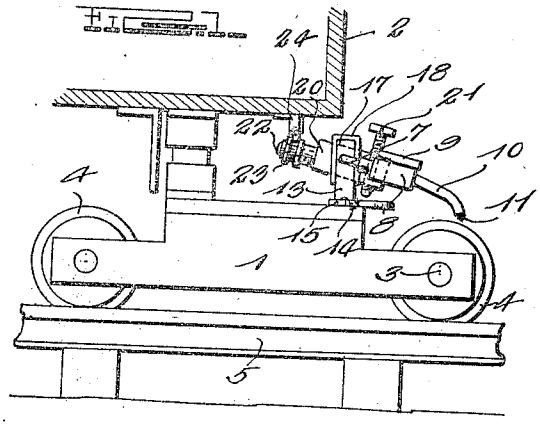
TRACK OILER.

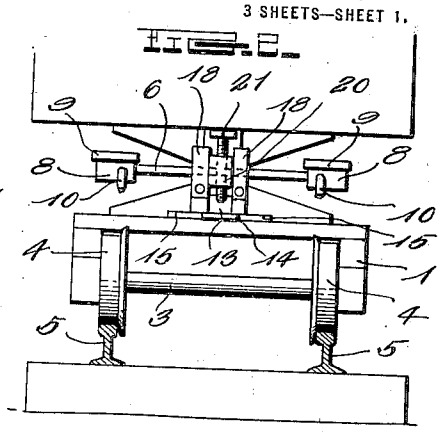
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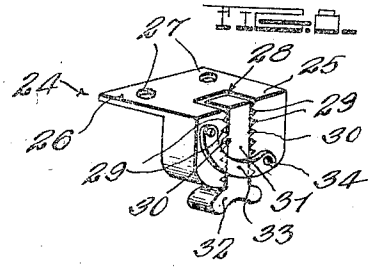
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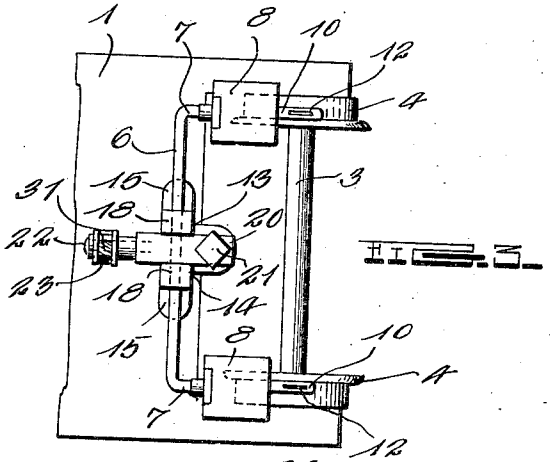
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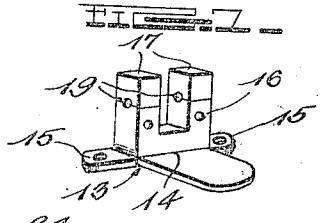
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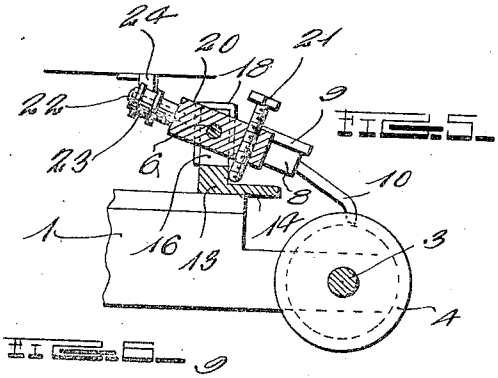


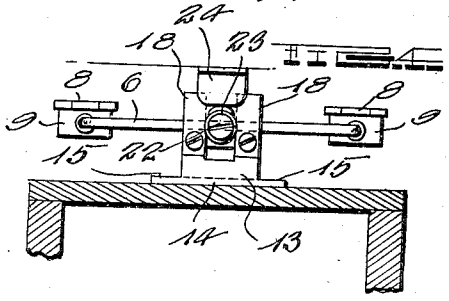


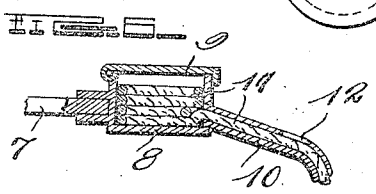












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TRACK OILER.

APPLICATION FILED JUNE 23, 1921.

1,436,837.

Patented Nov. 28, 1922.

3 SHEETS—SHEET 2.

FIG. 9.

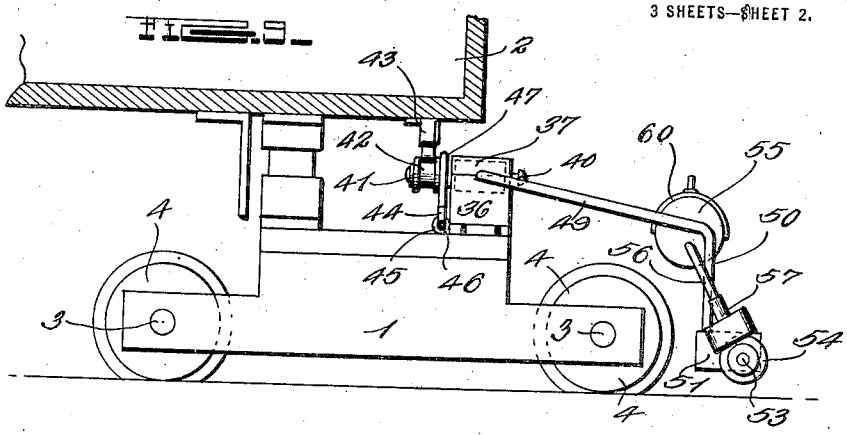


FIG. 10.

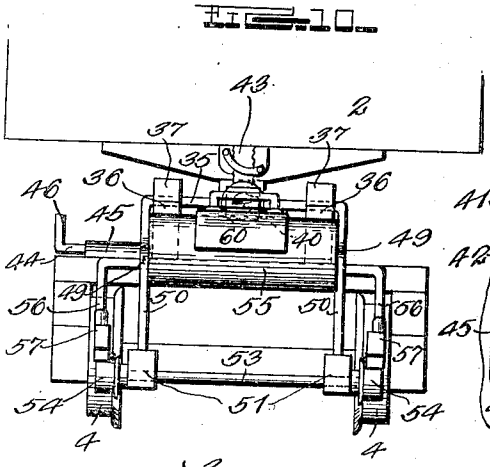


FIG. 11.

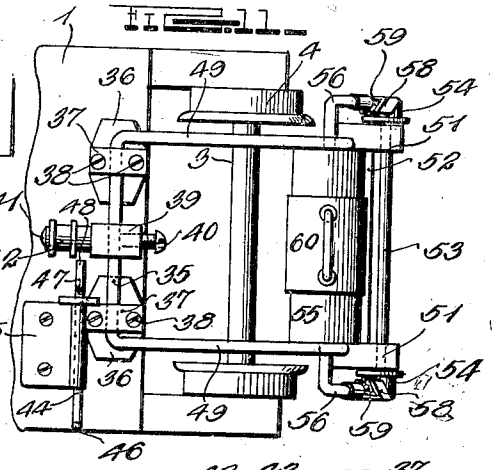


FIG. 13.

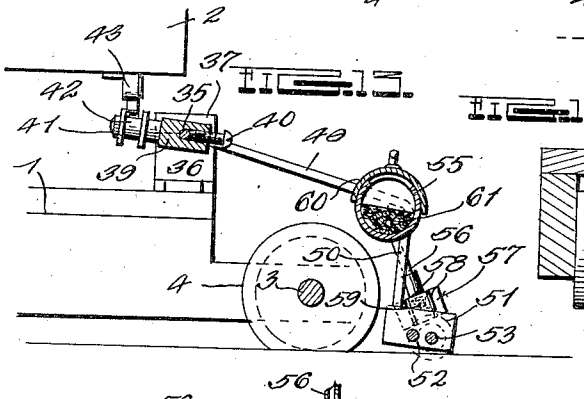


FIG. 12.

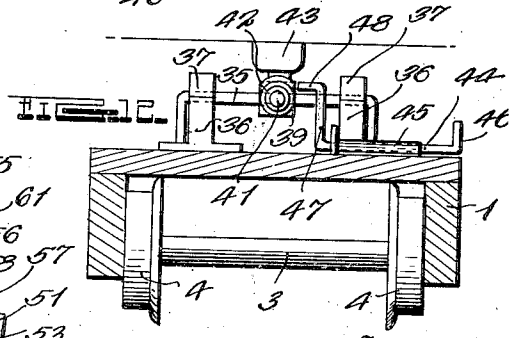


FIG. 14.

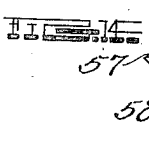
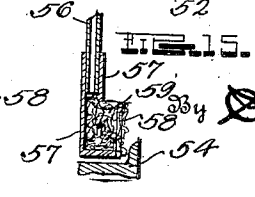


FIG. 15.



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TRACK OILER.

APPLICATION FILED JUNE 23, 1921.

1,436,837.

Patented Nov. 28, 1922.

3 SHEETS—SHEET 3.

FIG. 16.

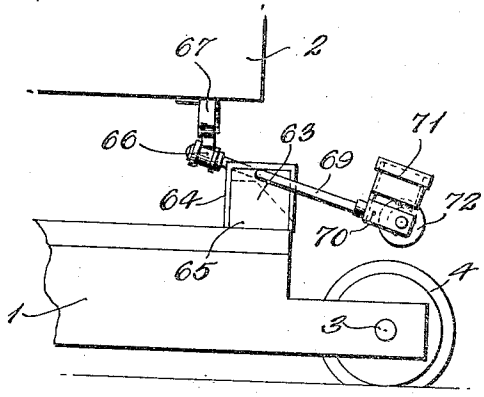


FIG. 17.

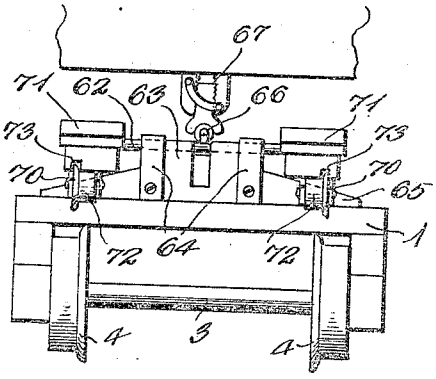


FIG. 18.

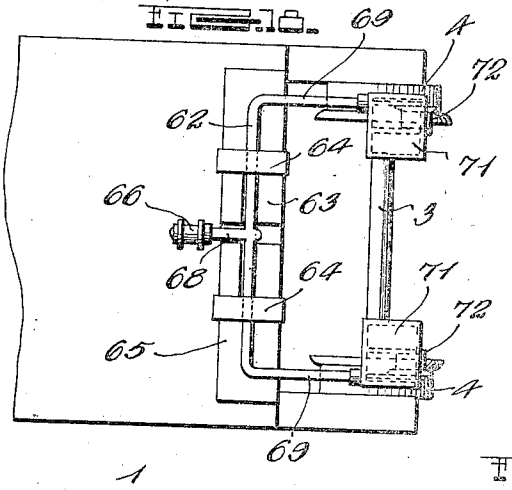


FIG. 20.

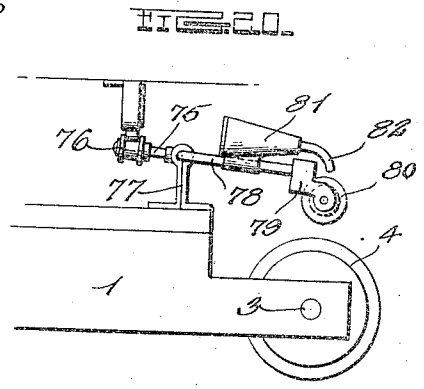


FIG. 22.

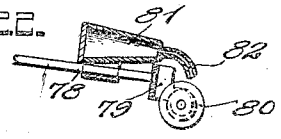


FIG. 21.

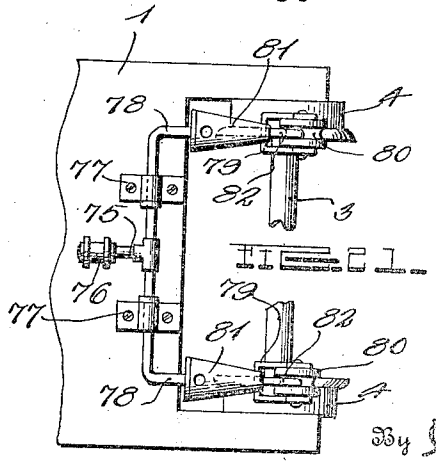
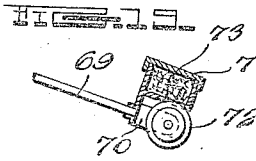


FIG. 23.



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Patented Nov. 28, 1922. 1,436,837

UNITED STATES PATENT OFFICE.

FRANK W. WALLACE, OF CHATTANOOGA, TENNESSEE.

TRACK OILER.

Application filed June 23, 1921. Serial No. 479,872.

To all whom it may concern:

Be it known that I, FRANK W. WALLACE, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented certain new and useful Improvements in Track Oilers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved oil device for applying oil to the rails of a track at a curve and one object of the invention is to provide an improved oiler which may be held in an inoperative position while a car moving along a straight stretch of track and which may be permitted to move to an operative position while a car is turning a curve and thus permit oil to be applied to the track at the curve so that the car may readily turn the curve and excessive wear upon the wheels and rails prevented at the curve.

Another object of the invention is to so construct this oiler that it may be mounted upon the truck and be releasably held in an inoperative position through engagement with an abutment carried by the abutment of the car when moving along a straight stretch of track.

Another object of the invention is to so construct this oiler that the weight of the oiler will cause it to move into an operative position when the trucks are turned in passing around a curve.

Another object of the invention is to so construct this oiler that adjustments may be made to limit its movement when swinging to an operative position and to further permit of proper adjustment so that the lever arm of the device may be properly engaged by the abutment carried by the car body and the oiler swung upwardly to an inoperative position after the car has passed around a curve and enters upon a straight stretch of track.

Another object of the invention is to so construct this device that a latch may be provided to hold the oiler in an inoperative position and thus prevent it moving to an operative position in turning a curve if so desired.

Another object of the invention is to so construct this improved oiler that it may be applied to cars having a conventional construction of truck and body portion.

This invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a view in side elevation showing the oiler applied to a car truck.

Figure 2 is a view showing the structure of Fig. 1 in end elevation.

Fig. 3 is a top plan view of the truck showing the oiler mounted thereon.

Figure 4 is a view showing the truck in transverse section and the oiler in rear elevation.

Figure 5 is a vertical sectional view through the truck and oiler.

Figure 6 is an enlarged sectional view through one of the oil boxes and applying spout of the oiler.

Figure 7 is a perspective view of the bearing bracket forming part of the oiler.

Figure 8 is a perspective view of the lever-engaging abutment mounted upon the body of the car.

Figure 9 is a view similar to Fig. 1 showing a modified construction of oiler.

Figure 10 is a view showing the structure of Fig. 9 in front elevation.

Fig. 11 is a top plan view of the truck and oiler mechanism shown in Fig. 9.

Figure 12 is a view showing the oiler of Fig. 9 in rear elevation.

Figure 13 is a vertical sectional view through the oiler and truck of Fig. 9.

Figure 14 is an enlarged top plan view of the oil applying brush shown in Fig. 9.

Figure 15 is a vertical sectional view through the oil applying brush of Fig. 14.

Figure 16 is a side elevation showing a modified form of oiler.

Figure 17 is a view showing the truck and oiler of Fig. 16 in end elevation.

Figure 18 is a top plan view of the truck and oiler shown in Fig. 16.

Figure 19 is a vertical sectional view through the structure of Fig. 18.

Figure 20 is a view similar to Fig. 16 showing a modified form of oiler.

Figure 21 is a top plan view of the oiler and truck shown in Fig. 20.

Figure 22 is a vertical sectional view through the oiler and truck of Fig. 20.

This improved oiler is to be mounted upon the truck 1 which is of a conventional construction and may be the usual car truck or an auxiliary truck. This truck is positioned beneath the body 2 of the car and provided with the usual axles 3 upon which will be mounted the wheels 4 which rest upon the rails 5 of the track. One of the oilers will be applied to each truck. In the accompanying drawings, there has been shown four forms of the oiler, each of which is so constructed that it can be mounted upon a conventional construction of truck. One form is illustrated in Figs. 1 through 7, the second form is illustrated in Figs. 8 through 15, the third form is illustrated in Figs. 16 through 19 and the fourth form is illustrated in Figs. 20 through 22.

In the form illustrated in Figs. 1 through 7, there will be provided a rocker shaft 6 as shown in Fig. 3 and have its arms 7 connected with the oil boxes 8, each of which is provided with a cover 9 hingedly mounted so that it may be swung upwardly to an open position when desired. A spout 10 extends from each box and is intended to engage a wheel of the truck when the oiler is in an operative position. A length of wicking 11 is positioned in each of the boxes 8 and extends through the spout 10 and preferably has its end portion extending slightly beyond the end of the spout so that this wick will engage the wheel to apply oil to the peripheral face and inner face of the flange of the wheel. A slot 12 is provided in the spout as shown in Fig. 6 so that the wick may be moved in the tube when it is necessary to adjust the wick.

This rocker shaft 6 is rotatably mounted by means of a bearing bracket 13 which is secured to the truck 1 and is provided with a base portion 14 having side arms 15 through which the fasteners will pass. This base is provided with upstanding arms 16 upon which blocks 17 will be secured by means of clamps 18, the contacting faces of the arms 16 and blocks 17 being cut to provide shaft receiving openings 19 so that the shafts may be rotatably mounted as shown in Fig. 1. A block 20 is rigid upon this rocker shaft between the upstanding arms of the bearing brackets and is provided with a threaded opening through which will pass a set-screw 21 to engage the bearing bracket as shown in Fig. 5 and thus limit rocking movement of the oiler when moving to an operative position. By means of this set-screw, the spout 10 can be prevented from moving into too close a contact with the wheels. A pin 22 extends rearwardly from this block 20 and carries a roller 23 for engaging an abutment 24 carried by the car. It will thus be seen that this pin 22 and roller 23 will constitute a handle or lever element by means of which the oiler may be swung upwardly to an inoperative position and retained in the inoperative position as long as the roller is in engagement with the abutment of the car. In some cars, the space between the bottom of the car body and the truck will vary and therefore an adjustment abutment has been provided as shown in Fig. 8. This abutment is provided with a socket block 25 having a rearwardly extending tongue 26 provided with fastener receiving openings 27 so that the block may be secured to the underface of the car. A pocket 28 is formed in this block 25 and is in the form of a vertically extending slot having its side walls provided with clutch teeth 29 for engagement by the teeth 30 which extend from the sides of the shank portion 31 of the roller engaging element. The head 32 of this roller engaging element is arcuate in shape and is provided with rounded end portions so that it may readily move into and out of engagement with the roller 23. After the block 25 has been secured to the underface of the car body, the roller engaging element may be put in place so that its head extends the proper distance beneath the block 25 to engage the roller and the securing strip which is pivotally connected with the block can then be swung to the operative position as shown in Fig. 8 and secured by the securing screws 34.

In the form shown in Figs. 9 through 15, the rocker shaft 35 is mounted in bearing blocks 36 having upper sections 37 which correspond to the head blocks 17 and are releasably held in place by removable fasteners 38. A block 39 corresponding to the block 20 is mounted upon the rocker shaft between blocks and is releasably held in a set position by the set-screw 40. A lever handle 41 which carries a roller 42 corresponding to the roller 23 extends from this block into position for engagement by the abutment 43 which will be similar to the abutment 24. It will thus be seen that when this form is in use, the operation will be similar to that shown in Figs. 1 through 5. In connection with the form illustrated in Figs. 9 through 15, there has been shown a latch 44 which is slidably mounted in a bearing 45 secured upon the truck 1 to the rear of one of the bearing blocks 36. This latch is provided at one end with an actuating handle 46 and at its inner end is provided with an upstanding arm 47 terminating in a finger extension 48 for engaging the lever arm 41 and securely but releasably holding the oiler in an inoperative position and preventing it from moving to an operative position when a turn is being made. On rainy days when the tracks are wet, it is not desired to permit the oiler

to move to an operative position when making a turn and therefore this latching mechanism has been provided which can be used in connection with the other forms of the invention as well as in connection with the form now being described.

From an inspection of Fig. 9, it will be seen that the arms 49 of the rocker shaft 35 are a greater length than the arms of the rocker shaft 6 and that these elongated arms extend forwardly and are provided with downwardly extending free end portions 50 which are connected with blocks 51 which are connected by a cross rod 52 and serve as journal blocks carrying the axles 53 upon which will be mounted small wheels 54 for engaging the rails of the track in advance of the wheels 4 of the car truck. An oil reservoir or tank 55 is secured between the forward end portions of the arms 49 as shown in Figs. 9 and 10 and this tank or reservoir is provided with outlet pipes 56 which extend downwardly as shown and communicate with heads 57 which are in the form of open wick-holding boxes provided with side wings 58 so that wicking 59 may be placed in the heads or boxes 57 with a portion of the wicking extending between the arms 58 to engage the flanges of the wheels or rollers 54 and apply oil to these wheels or rollers so that this oil may be transferred to the tracks. A removable cover 60 is provided for the tank or reservoir 55. A length of wicking 61 may be placed in this tank similar to the wicking 11 of the box 8 and lead through the pipes 56 to convey the oil into the boxes 59. The wicking in the boxes 59 may constitute separate wicking saturated by means of the oil fed through the medium of the wicking 61 or the wicking in the boxes may be portions of the wicking 61 if so desired. It will thus be seen that this construction while somewhat different from that shown in Figs. 1 through 5 provides an oiler which will operate after the manner of the oiler shown in Figs. 1 through 5 but that when in use the oil will be applied to rollers which will transfer it to the rails of the tracks instead of being applied to the wheels of the car.

In the form shown in Figs. 16 through 19 inclusive, the rocker shaft 62 is mounted in bearing arms 63 carried by the truck 1 and is held in place by clamps 64. These bearing arms extend upwardly from a base 65 which is secured to the truck in such a position that the roller 66 will be positioned for engagement by the abutment 67 which corresponds to and is constructed similar to the abutment 24. It will thus be seen that when the roller engages the abutment, the lever arm 68 which carries the roller will be moved to rotate the rocker shaft and thus impart movement to the oiler to swing the arm 69 thereof upwardly to an inoperative position. These arms are connected with yokes 70 positioned beneath the oil boxes 71 and carrying rollers 72 which are provided with flanges extending into the boxes 71 through slots 73 formed in the boxes as shown in Fig. 17. Suitable wicking is provided in each of the boxes and it will thus be seen that as the rollers rotate oil will be applied to the rollers and this oil will be transferred to the wheels 4 engaged by the rollers when the device moves downwardly to an operative position. The operation of this form is similar to that described in connection with the two forms previously described and therefore it is not necessary to outline the operation in detail. It will suffice to state that when the car is turning a curve, the abutment 67 moves out of engagement with the roller 66 and the device can then swing to the operative position with the rollers 72 resting upon the wheels 4 to transfer oil to the car wheels which in their turn will apply the oil to the rails.

In the form shown in Figs. 20, 21 and 22, the rocker shaft 74 is similar in construction to the rocker shaft 62 and is provided with an actuating lever handle 75 which will carry a roller 76 for engaging the abutment carried by the car. This rocker shaft is mounted in bearings 77 and is provided with forwardly extending arms 78 which are connected with yokes 79. Rollers 80 are carried by these yokes for engaging the flanges of the car wheels 4 so that oil may be transferred to the car wheels. A funnel-shaped receptacle 81 is connected with each of the arms 78 and is provided with an outlet spout 82 which extends close to the roller or wheels 80 so that oil may be readily applied to the rollers. Wicking may be placed in each of these receptacles and extend through the outlet spouts so that the oil may be applied to the roller by a wiping action. The operation of this form is similar to the operation of the other forms described, the device being held in a raised or inoperative position by engagement of the roller 76 with the abutment of the car, and the weight of the device causing it to swing downwardly to an operative position when the car is passing around a curve and the trucks are swung to move the rollers out of engagement with the abutment of the car. It is of course understood that in each instance, the trucks of the car will each be provided with one of the oiling devices so that sufficient oil may be applied to the tracks or wheels of the car to permit of the car readily passing around the curve in the track.

I claim:

1. The combination with a car including a body and a pivotally mounted truck beneath the boly having rail engaging wheels,

of oil applying means comprising a frame structure connected with the truck for vertical swinging movement into and out of an operative position and including a handle extension, oil applying means carried by said frame, and abutment means carried by the car body for engaging the handle extension and holding the same in a raised and inoperative position while the car is moving along a straight stretch of track, the handle extension moving out of engagement with the abutment to permit the frame to swing downwardly to an operative position when the truck is turned to one side during passage of the car around a curve in the track.

2. The structure of claim 1 having the frame in the form of a horizontal rocker shaft rotatably mounted in bearing means carried by the truck and provided with a handle extension and side arms, lubricant carrying means carried by said side means, and lubricant applying means associated with the lubricant carrying means.

3. The structure of claim 1, and means for controlling swinging movement of the frame.

4. The structure of claim 1 including a rocker shaft, a block carried by said rocker shaft, means for limiting swinging movement of the rocker shaft, a lever extending from said block, and a roller for engaging the abutment of the car carried by the lever.

5. The structure of claim 1, having the abutment means carried by the body of the car consisting of a socket element connected with the body of the car, and a handle engaging element adjustably connected with the socket element and movable in a vertical plane when adjusted.

6. The structure of claim 1 having the abutment element of the car body consisting of a socket element connected with the body of the car, and provided with a vertically extending pocket having its side walls provided with teeth, and a handle engaging element having a head, a shank positioned in the pocket of the socket element and provided with teeth for engaging the teeth of the side walls of the pocket, and means for releasably holding the shank within the pocket.

7. A device of the character described comprising a bearing for connection with the truck of a car, a rocker shaft disposed horizontally and journalled in the bearing and having side arms and a handle extension, oil boxes carried by the side arms, and spouts extending from the oil boxes for engaging the wheels of a car when in an operative position with the arms swung downwardly, and abutment means for connection with the body of a car to engage the handle extension of said rocker shaft and rotate the rocker shaft to swing the oil boxes upwardly and move the spouts thereof out of engagement with the car wheels.

8. The structure of claim 7 and a wick in each of said oil boxes extending through the spouts for feeding oil through the spouts and applying the oil to the car wheels.

9. The structure of claim 1, and latching means for engaging the handle extension and holding the oil applying means in an inoperative position and preventing movement of the same to an operative position during passage of the car around a curve.

10. The structure of claim 1, and latching means for engaging the handle extension and holding the oil applying means in an inoperative position and preventing movement of the same to an operative position during the passage of the car around a curve, said latching means consisting of a bearing mounted upon the car truck and a bar slidably mounted in the bearing and having a handle engaging element at one end and at its second end having an arm extension for engaging the handle extension of the body structure when said latching means is moved to an operative position.

11. The combination with a car including a body and a truck pivotally mounted beneath the body for swinging horizontally out of alinement with the longitudinal axis of the car, of an abutment carried by said car, and lubricating means comprising a carrier fulcrumed intermediate its length upon said truck for vertical swinging movement and having one end portion provided with applying means and its other end portion engageable with said abutment to hold the carrier against swinging movement with the applying means in a raised position when the truck is in alinement with the longitudinal axis of the car body and swing the carrier vertically to lift the applying means to an inoperative position when the truck moves from a turned position into alinement with the longitudinal axis of the car.

12. The combination with a car including a body and a truck pivotally mounted beneath the body for swinging horizontally out of alinement with the longitudinal axis of the car, of an abutment carried by said car, and lubricating means comprising a carrier carried by said truck for vertical movement into and out of an operative position, lubricant applying means carried by said carrier, said carrier having movement into an operative position when the truck moves out of alinement with the longitudinal axis of the car when following a turn in a track, said abutment having engagement with the carrier to move the carrier to an inoperative position and retain the

carrier in the inoperative position when the truck returns to a position in alinement with the longitudinal axis of the car body.

13. An abutment for the purpose set forth comprising a support, and cam means having a shank portion adjustably and releasably connected with said support.

14. An abutment for the purpose set forth comprising a socket having side recesses, and a cam including a head for engaging an article to be acted upon and a shank fitting into said socket and having side extensions fitting into said recesses.

In testimony whereof I have hereunto set my hand.

FRANK W. WALLACE.