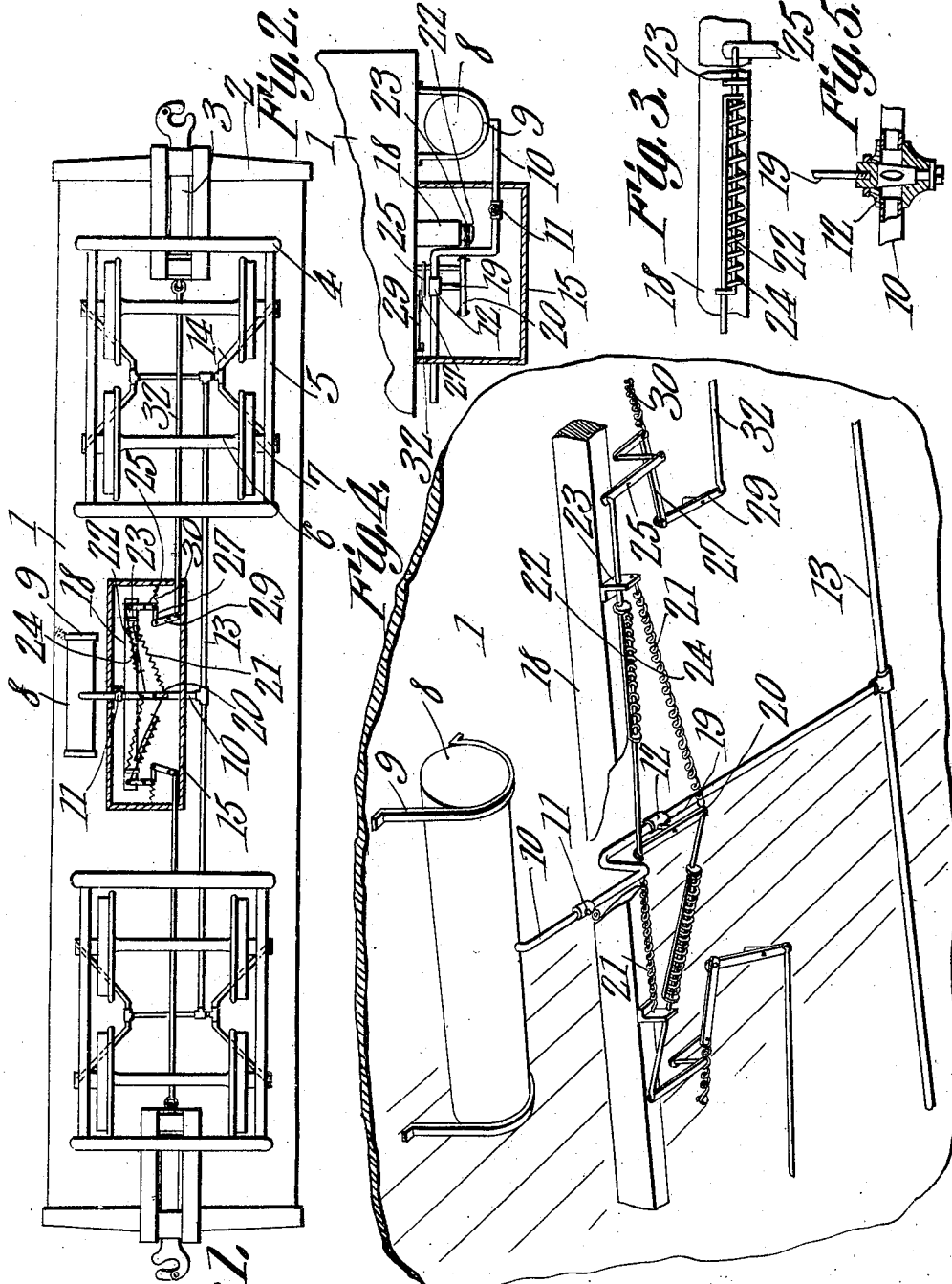


R. F. ADAMS.
 AUTOMATIC OILER.
 APPLICATION FILED JUNE 8, 1909.

981,737.

Patented Jan. 17, 1911.



Witnesses
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UNITED STATES PATENT OFFICE.

RICHARD FIELDS ADAMS, OF PALESTINE, TEXAS.

AUTOMATIC OILER.

981,737.

Specification of Letters Patent. Patented Jan. 17, 1911.

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To all whom it may concern:

Be it known that I, RICHARD FIELDS ADAMS, a citizen of the United States, residing at Palestine, in the county of Anderson and State of Texas, have invented a new and useful Automatic Oiler, of which the following is a specification.

This invention relates to automatic oilers for vehicles, particularly for railroad cars or coaches and consists in the novel construction and arrangement of parts as hereinafter shown and described.

The object of the invention is to provide a simple and an efficient mechanism for oiling journal bearings of a vehicle of the character indicated while the vehicle is in motion.

In the accompanying drawings:—Figure 1 is a bottom plan view of the device showing parts thereof in section. Fig. 2 is a transverse sectional view of the device. Fig. 3 is a detail view of a yielding link which forms a part of the device. Fig. 4 is a perspective view of a portion of the device with parts broken away and parts removed. Fig. 5 is a cross sectional view through a valve which is a component part of the device.

In the accompanying drawing 1 designates the body of a railroad car or coach having end sills 2 and drawheads 3. Secured to the body 1 of the car are trucks 4 having side frames 5 which carry journal boxes 7 for the axles 6. An oil reservoir 8 is suspended from the under side of the body of the car by straps 9. Leading from the said reservoir is a main feed pipe 10 provided with a main valve 11 for regulating the flow of oil from the reservoir through the said main feed pipe and an auxiliary valve 12 for regulating the flow of oil from the main pipe through its branches 13. The branches 13 extend along the under side of the body of the car and terminate in Y-shaped branches 14 overlying the journal boxes 7 and communicating with the journals. To inclose the valves 11 and 12 and secure them from being unduly tampered with a casing 15 is provided. This casing may be hung to the bottom of the car if desired. Positioned longitudinally of the casing is a beam 18 which is secured to the under side of the car body and supports the automatic regulating device which will now be described.

The stem 19 of the valve 12 terminates in

a transversely disposed arm 20, to the ends of which the inner ends of springs 21 are attached. Yielding links 22 are also attached at their inner ends to the ends of the arm 20. The outer portions of the yielding links are slidably fitted in brackets 23 carried by the beam 18 and are connected directly to the drawheads 3. Each yielding link 22 is preferably formed of a pair of rods each terminating at one end in an eye to engage and slidably fit the shank of the other. The coil springs 24 are arranged intermediate the eyes and operate to hold said eyes spaced when in normal position. The distance between the terminal eye of the rod connected with the valve stem and the bracket 23 is made great enough to permit the valve to be wide open when the eye is in contact with the bracket. When the parts are in this position any further movement of the drawhead will not be transmitted to the valve stem but will be taken up by the coil springs. The outer ends of the coil springs 21 are secured to the brackets 23 and exert pressure on the arms 20 counter to the operating movement of the yielding links 22 whereby to normally hold the valve closed.

Secured to the free end of each yielding link 22 is a lever 25 which is pivotally secured to the under side of the body of the car. A link 27 is attached at one end to the lever 25 and also to one end of a coil spring 30. The other end of the link 27 is attached to one end of a lever 29 fulcrumed to the car body 1. The said coil spring is secured at its opposite end to the car body 1 and exerts a pressure on the lever 25 in the direction of the drawhead 3, the purpose of this coil spring being to modify the jerky motion imparted to the lever by the drawhead.

The free end of the lever 29 is attached to a connecting rod 32 which extends through the casing and is secured at its outer end to the rear end of the drawhead 3. As may readily be seen by this construction when the train is in motion the drawhead is pulled out of its normal position and so held. This motion is transmitted through the connecting rod 32, lever 29, link 27, lever 25, and the yielding link 22, to the stem 19 of the valve 12, opens the valve 12 and holds it open. When the train comes to a stop the motion is reversed, and aided by the coil spring 21 the valve stem is returned to its normal position and held there until the train is put in motion. In this way when

a train is halted or sidetracked on a siding the oil supply is automatically shut off from the journals and is not again turned on until the train is put in motion.

5 Having described my invention, what I claim is:—

1. In combination with a vehicle having a draw head and a journal bearing, an oiler comprising a reservoir connected with the
10 journal bearing and means connected with the draw head and operated thereby to maintain and interrupt communication between the reservoir and bearing.

2. In combination with a vehicle having
15 draw heads and journals, an oil reservoir attached to the vehicle, a main feed pipe terminating in Y-shaped branches overlying the journals, a main valve, an auxiliary valve normally held closed, and means connected
20 with the draw heads for automatically opening and closing said auxiliary valve.

3. In combination with a vehicle having draw heads and journals, a reservoir attached to the vehicle, a main feed pipe having lateral branches overlying the journals,
25 a valve connected to said main feed pipe and having a stem terminating in arms, means connecting said arms to the draw heads whereby to open and close the said valve.

4. In combination with a vehicle having
30 draw heads and journals, a reservoir attached to the vehicle, a main feed pipe having branches overlying the journals, a main valve to regulate the flow from said reservoir, an auxiliary valve having a stem terminating in a lever, links and levers connecting the opposite ends of said lever to the draw heads, and means for yieldingly
35 holding said valve in closed position.

5. In combination with a vehicle having
40 draw heads and journals, a reservoir attached to the vehicle, a main feed pipe having branches overlying the journals, a valve positioned in the main feed pipe, a lever connected with the stem of the said valve,
45 spring actuated links connected to opposite ends of said lever, means for connecting the links to the opposite draw heads of the vehicle, and coil springs exerting pressure on said lever to keep the valve normally
50 closed.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

RICHARD FIELDS ADAMS.

Witnesses:

R. E. MORRIS,
A. N. DEXTER.