

C. B. O'SULLIVAN & P. MURPHY.
Apparatus for Lubricating Railways.

No. 166,548.

Patented Aug. 10, 1875.

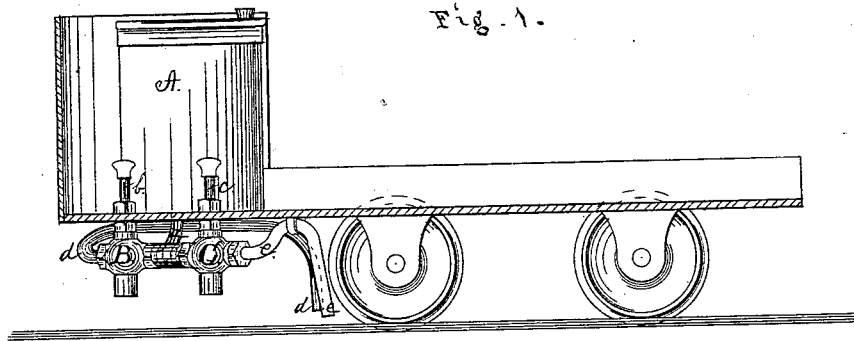
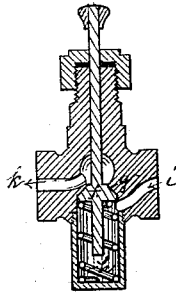


Fig. 2.



WITNESSES.

H. A. Jenkins
J. C. Hubbell

INVENTORS.

C. B. Sullivan
P. Murphy

UNITED STATES PATENT OFFICE.

CORNELIUS B. O'SULLIVAN AND PATRICK MURPHY, OF NEW ORLEANS,
LOUISIANA.

IMPROVEMENT IN APPARATUS FOR LUBRICATING RAILWAYS.

Specification forming part of Letters Patent No. **166,548**, dated August 10, 1875; application filed
February 20, 1875.

To all whom it may concern:

Be it known that we, CORNELIUS B. O'SULLIVAN and PATRICK MURPHY, residents of the city of New Orleans and State of Louisiana, have invented a certain new and useful Improvement in Apparatus for Lubricating Railway-Curves; and we do hereby declare the following to be a full, clear, and correct description of the same, reference being had to the annexed drawing, making a part of this specification.

The object of our invention is to provide a simple, cheap, and efficient apparatus for lubricating curves in railroad-tracks, in order that the cars may glide more smoothly around the same. It consists of two valves, by means of which water is drawn from a reservoir and discharged through suitable pipes upon the railway-curves in any desired quantity.

Our invention will readily be understood by referring to the drawing, on which—

Figure 1 is a side elevation of a car as when provided with our improved apparatus, while Fig. 2 represents a section of one of the valves.

On the drawing, A represents a tank or reservoir for containing the water with which it is desired to lubricate the rails. The said reservoir is secured to the front platform of the car, and, while fulfilling the purpose for which it is designed, also subserves as a seat for the driver of the car. *a* is a pipe leading from the bottom of the reservoir to the valves B and C, both of which are secured beneath the platform of the car in such a manner that their stems *b* and *c* may pass up through the floor of the same. The said valves are operated independently of one another, and each is provided with its own discharge-pipe, as shown at *d* and *e*, through which the water is conveyed and discharged upon the rail imme-

diately in front of the forward wheels of the car. The construction of our valves, as well as the manner of operating the same, will be at once understood by an examination of the sectional view shown at Fig. 2. *f* is the valve proper, which is held closely against its seat *g* by means of a spiral spring, *h*. The face of the valve or seat should be of rubber, leather, or other equivalent material, in order that the jolting of the car may not in any manner injure the same. *i* is the supply and *k* the discharge openings. It will be observed that the supply is admitted below the valve *f*. This is done in order to relieve the spiral spring *h* of the weight of the valve, as well as to hold the latter more closely against its seat.

In operating our invention it is only necessary that the driver should with his foot depress the valve of the pipe leading to the track or curve which it is desired to lubricate.

We are aware that, in connection with tanks, a horizontal pipe having numerous perforations, and connected with the tank by a suitable supply-pipe, has been used, so as to distribute a fine spray of water over the entire width of the track. Such an arrangement we do not claim.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination of the reservoir A, supply-pipe *a*, valves B and C, and discharge-pipes *d* and *e*, as and for the purpose set forth.

C. B. O'SULLIVAN.
P. MURPHY.

Witnesses:

H. N. JENKINS,
J. C. HUBBELL.