No. 699,747. Patented May 13, 1902.

F. M. DE LAPP.

RAILWAY TRACK LUBRICATOR.

(Application filed Oct. 9, 1901.)

(No Model.)

Fig. 1

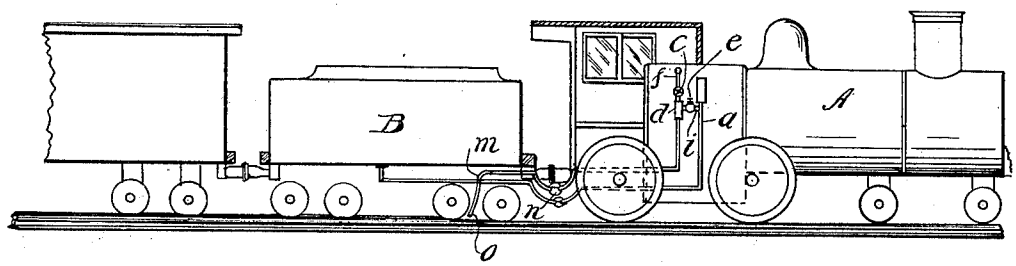


Fig. 2

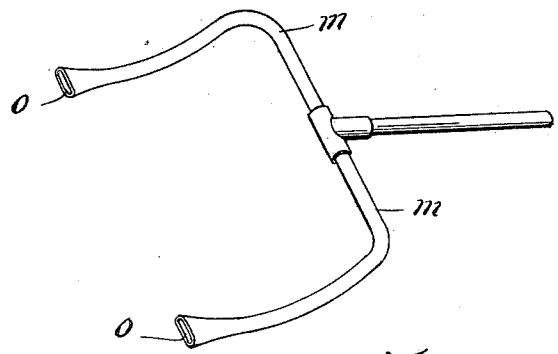
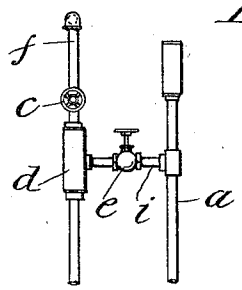


Fig. 3



Witnesses:

E. L. Noble.

H. Mackelvey.

Inventor,

Fred M. DeLapp.

By H. C. Hunsberger

Att'y.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRED M. DE LAPP, OF CHICAGO, ILLINOIS.

RAILWAY-TRACK LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 699,747, dated May 13, 1902.

Application filed October 9, 1901. Serial No. 78,128. (No model.)

To all whom it may concern:

Be it known that I, FRED M. DE LAPP, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented a new and useful Improvement in Railway-Track Lubricators, of which the following is a specification.

This invention is designed to provide a means for lubricating the railway-track rails by a discharge of water from the tank upon the rails which shall at all times be under the control of the engineer in the cab. The object of wetting the rails immediately in the rear of the engine or locomotive is to reduce the strain on the motive power, especially when rounding curves, and to a limited extent reduce the wear on the wheels when the brake is applied by reducing the friction, as when the wheels slide on the rails. This is accomplished by means of a steam-pipe connected with the head of the boiler, which extends from the cab to the rear of the forward wheels of the tank-car. A T connects this pipe with the injector on the engine, provided with a valve, and above this latter connection in the steam-pipe is another valve. A siphon or suction-valve is provided in the steam-pipe at the T connection. The engineer by turning on the valve in the steam-pipe and opening the valve in the T draws the water from the injector, which is forced down and sprayed upon the rails.

The method of construction is shown in the drawings, in which—

Figure 1 is a side elevation of a locomotive with a portion of the cab removed, showing the device attached to boiler-head. Fig. 2 is an enlarged view of the forked discharge-pipe which delivers water to the track-rails. Fig. 3 is an enlarged view of the connecting-valves.

In the construction Fig. 1 shows the side of the cab of the engine removed to expose the device attached to the head of the boiler A. The injector-pipe *a*, connecting the boiler with the tank-car or tender B in the usual manner, is also shown. A pipe *f* is inserted into the top of the boiler, as shown, and carried downward parallel with the injector-pipe *a* and is extended rearward by means of the flexible coupling *n* underneath the center of the forward truck of the tender B, where it is provided with a forked terminal *m*, with a nozzle over each of the rails. A valve *c* is inserted in the pipe *f* within easy reach of the engineer in the cab. A suction-valve or siphon *d* is operatively connected with the pipe *f* beneath the valve *c*, and a T *i* connects the suction-valve *d* with the injector-pipe *a*. This T *i* is also provided with a valve *e*. The suction-valve or siphon *d* and the T *i* may be cast in one piece. The forked tube or terminal for the pipe *f* is flattened at the nozzle *o* to spread the water, so that the object of the invention may not be defeated by the swaying of the car, and to avoid useless waste of water, which is an important feature on railway-trains.

In operation the valves *c* and *e* are opened, when the steam from the pipe *f* enters the suction-valve *d*. The water is drawn from the injector-pipe *a* and forced down the tube *f* and discharged from the nozzles *o* and spread upon the track-rails.

Having thus described my invention, while I am aware that railway-track rails have heretofore been lubricated by water from the tender, what I claim as new, and desire to protect by Letters Patent, is—

1. In a lubricator for railway-rails the combination with an injector-pipe of a steam-pipe, inserted into the head of the boiler and extending downward underneath the cab and to the truck of the tender, a suction-valve in said pipe, a T connecting said suction-valve with said injector-pipe and valves to operate said lubricator substantially as specified.

2. In a lubricator for track-rails a steam-induction pipe connected with the head of boiler of the engine a suction-valve connecting with said induction-pipe, a T connecting said suction-valve with the water-injector pipe on the boiler of the engine and means to operate said device substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

FRED M. DE LAPP.

Witnesses:

H. C. HUNSBERGER,

A. L. AUSTEN.