

W. H. GAILOR.

ROAD OILER.

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932,116.

Patented Aug. 24, 1909.

Fig: 1.

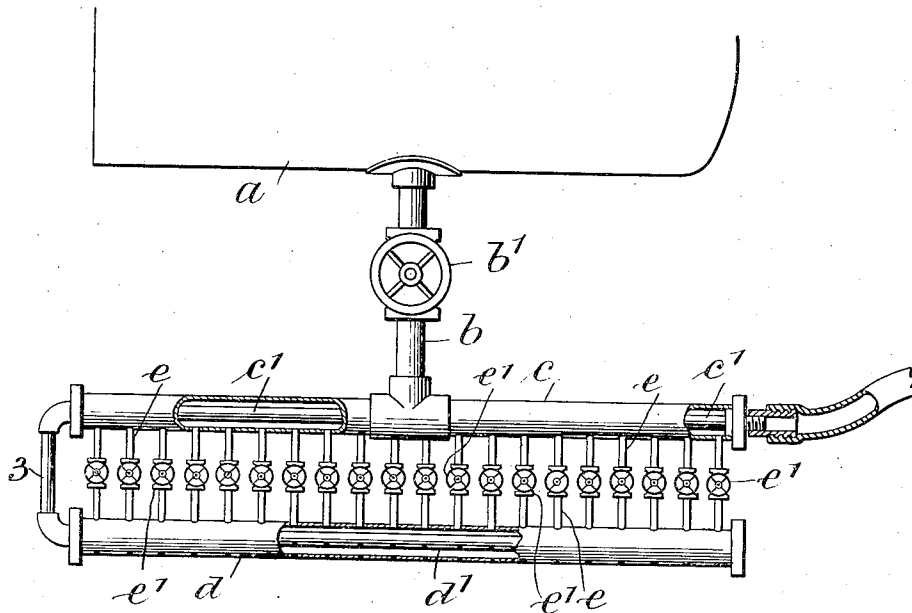
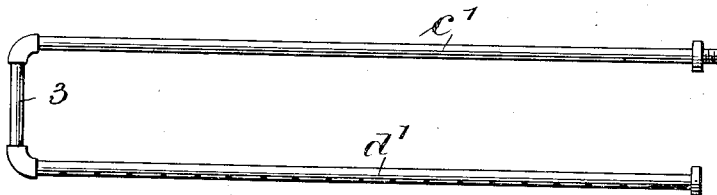


Fig: 2.



Witnesses

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UNITED STATES PATENT OFFICE

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ROAD-OILER.

932,116.

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To all whom it may concern:

Be it known that I, WILLIAM H. GAILOR, a citizen of the United States, residing at Saratoga Springs, in the county of Saratoga and State of New York, have invented an Improvement in Road-Oilers, of which the following is a specification.

My invention relates to a device for supplying oil to the surface of a road, particularly a road of earth or macadam in contradistinction to a block pavement of wood or stone, with the object of laying the dust and preventing the accumulation or making of appreciable mud in stormy weather. Devices having this object in view have heretofore been employed but it has been difficult to employ oil in a sufficiently heated and limpid condition and to discharge the same quickly and in a comminuted condition evenly upon the surface of the earth in the presence of a heated medium, so that it has frequently happened that too much thick oil has been deposited on the road and that it has taken too long for the material of the road to absorb the oil, with the partial result that it has been necessary to close the road to traffic for too long a time.

In carrying out my invention, I provide for an even distribution of oil over a predetermined area of road surface; also for heating the oil prior to its delivery and for forcing the oil with steam together against the surface of the road, so that the warmed earth will the quicker absorb the oil and the oil will be in a better condition to be absorbed; also in case there should be a slight frost in the ground the heat will draw the same out and make it possible to oil the surface of the road at a season of the year when under ordinary circumstances it would not be possible.

The device forming the subject of my improvement is hereinafter fully described and claimed.

In the drawing, Figure 1 represents by an elevation the device of my improvement and Fig. 2 shows the steam pipes alone.

a represents a suitable tank adapted to be mounted on wheels or a suitable cart-body forming a receptacle for oil. From this tank extends a pipe *b* in the line of which is a valve *b'*; connected to and at least in part supported from the pipe *b* is a pipe *c* extending at right angles to the pipe *b* and of predetermined length for the area of oil to be delivered upon the road. A pipe *d* is arranged sub-

stantially parallel with the pipe *c* and these pipes are connected by a series of smaller pipes *e* in each of which is a valve *e'*. The pipe *d* is perforated along the lower wall for the discharge of the oil and so far as described, it is apparent that the oil may flow readily from the tank *a* through the pipe *b*, past the valve *b'* into the pipe *c*, through the series of pipes *e* and past their valves *e'* into the pipe *d* to be discharged. In addition to this structure I provide a pipe *c'* extending along centrally through the pipe *c* and a pipe *d'* extending along centrally through the pipe *d*. These pipes *c'* *d'* are connected by a pipe-arm 3 and the pipe *d'* closed at its opposite end while the pipe *c'* at its opposite end is adapted by a suitable coupling for connection with a pipe for supplying steam. The ends of the pipes *c* and *d* are of course provided with suitable coupling rings surrounding the pipes *c'* and *d'* so as to make tight joints and retain the oil.

The lower wall of the pipe *d'* is perforated and while the oil passes through the series heretofore described for delivery onto the road, the steam passes into the pipe *c'*, warming the oil; through the pipe-arm 3 into the pipe *d'*, also warming the oil, and being discharged into the oil through the perforations therein and is discharged with the oil from the perforations in the pipe *d*; the hot steam and the hot oil being together delivered upon the surface of the road, heating the same so as to facilitate the absorption of the oil by the earth or stone and causing the oil by the heat to flow more readily and to be absorbed more completely and perfectly.

The valves in the pipes of the series *e* extending between the pipes *c* *d* are obviously for the purpose of regulating the amount of oil flowing through the pipes of the series, thereby regulating the discharge of the oil upon the road.

I claim as my invention—

1. In a road oiling device, the combination with a suitable receptacle for the oil and a pipe by which it is discharged therefrom, of parallel pipes, series of pipes connecting the same, valves in the pipes of the series, the upper of the parallel pipes being connected to the pipe discharging from the tank, and the lower of the parallel pipes perforated for the discharge of the oil onto the road and means for heating the oil in the parallel pipes.

2. In a road oiling device the combination with a suitable receptacle for the oil and a pipe by which it is discharged therefrom, of parallel pipes, series of pipes connecting the same, valves in the pipes of the series, the upper of the parallel pipes being connected to the pipe discharging from the tank, and the lower of the parallel pipes perforated for the discharge of the oil onto the road, and pipes for steam extending within and through

the parallel pipes and of appreciably smaller area so as to provide an oil chamber between, means for connecting said internal steam pipes and means for introducing steam into said steam pipes for heating the oil. 15

Signed by me this 9th day of January 1909.
WILLIAM H. GAILOR.

Witnesses:

IRVING W. WISWALL,
VEDDER GERVIN.