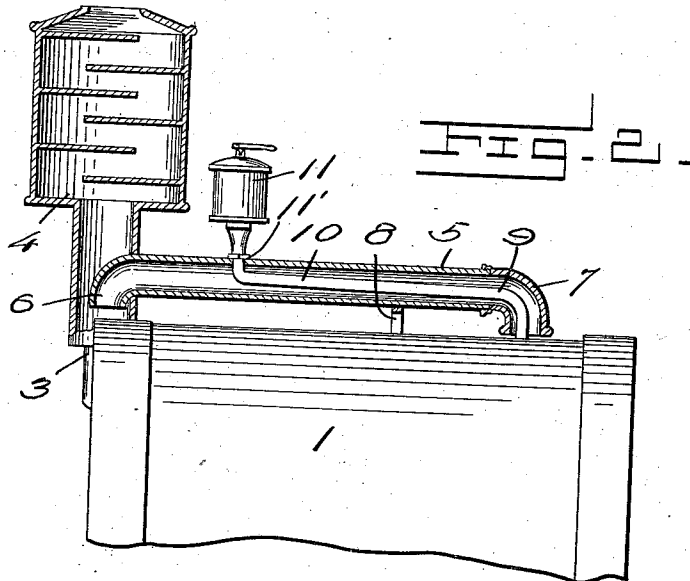
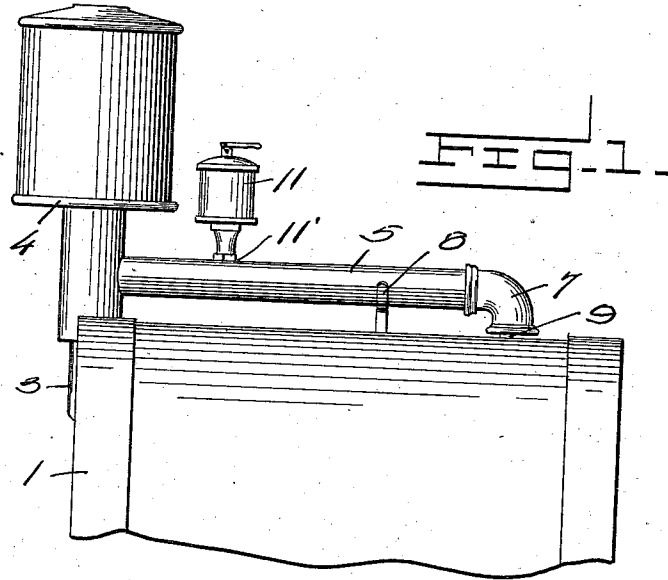


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OIL CONVEYER.
APPLICATION FILED AUG. 15, 1911.

1,016,736.

Patented Feb. 6, 1912.



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OIL-CONVEYER.

1,016,736.

Specification of Letters Patent.

Patented Feb. 6, 1912.

Application filed August 15, 1911. Serial No. 644,082.

To all whom it may concern:

Be it known that I, CHARLES E. BURNS, a citizen of the United States, residing at Momence, in the county of Kankakee and State of Illinois, have invented certain new and useful Improvements in Oil-Conveyers, of which the following is a specification.

This invention relates to improvements in lubricators, and more particularly to those wherein the oil is sufficiently heated for maintaining the lubricant in liquid or flowing condition.

The object of the invention is to provide suitable lubricating means in connection with the exhaust muffler of an engine cylinder, adapted to be heated by the exhaust passing through said chamber, whereby the lubricant is uniformly heated and constantly fed in proper condition to that portion of the cylinder desired to be lubricated under all conditions of weather.

Other objects and advantages will be apparent from the following description and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

Briefly stated the invention consists of a muffler connected to one end of the engine cylinder, a pipe connected to the muffler and passing along the cylinder, the opposite end of which pipe is properly supported at a suitable distance above the cylinder, and an inclined oil supply pipe located within the jacket, one end of which is connected to the cylinder of the engine and having its opposite end extending through the pipe adjacent to the exhaust muffler, and projecting upwardly through the heating pipe upon the upper end of which oil pipe an ordinary lubricant cup is supported.

In the drawings: Figure 1 is a side view of my complete invention as applied to a cylinder, Fig. 2 is a vertical longitudinal section of the device.

Referring to the drawings, 1 represents a cylinder of an engine which is of the usual construction and leading therefrom is an exhaust pipe 3 which is in communication with an exhaust muffler 4. Passing through the wall of the exhaust muffler 4 is one end of a heat radiating pipe 5, which projects a suitable distance within the said muffler, and turned down as at 6, the opposite portion of the said pipe extending horizontally and turned downwardly as shown at 7, the

lower end of which is supported a suitable distance above the cylinder by the bracket or support 8 fastened to the cylinder 1.

The lower end of the heat radiating pipe 5 is open and leading from the cylinder 1 and passing through the pipe is an oil supply pipe 9, the longitudinal extension 10 of which is arranged at an incline to the longitudinal or horizontal portion of the heat radiating pipe 5, whereby the oil passing from the lubricator cup 11 located outside of the jacket will pass through the oil supply pipe into the cylinder 1, in a fluid state.

As clearly shown in the drawings the lubricator cup 11 is connected to the upper end of the oil supply pipe which extends through a packed opening 11' in the heat radiating pipe 5 and in close proximity to the exhaust muffler 4, whereby the oil contained within the lubricator cup is heated to a certain degree before it passes into or enters the oil supply pipe 9 and becomes fluid as it passes through the pipe 10 into the cylinder.

From the foregoing description it will be seen that as the exhaust passes from the cylinder 1 into the exhaust muffler 4 the inner end of the heat radiating pipe 5 will convey some of the exhaust to the end of the pipe adjacent the cylinder, thus heating the oil supply pipe 10 located within the pipe 5 by the heat radiated from said pipe along its length.

The device herein described is very simple, durable and effective and can be easily attached to any engine or locomotive of the modern construction and without changing or altering any of the parts of the same.

What is claimed is:

1. In combination with the cylinder and exhaust muffler of an engine, of a heat radiating pipe communicating therewith, and an oil supply pipe passing through said heating pipe and having one end leading to and connected with the cylinder.

2. In combination with an engine cylinder and exhaust muffler thereof, of a heat radiating pipe one end of which projects a suitable distance within the exhaust muffler and is turned downwardly, an oil supply pipe located within the pipe and in communication with the cylinder, and a lubricator cup for feeding oil to said pipe.

3. In combination with an engine cylinder and exhaust muffler thereof, of a heat radiating pipe one end of which projects a suitable distance within the muffler and is

turned downwardly, an inclined oil supply pipe located within the heating pipe, one end of the oil pipe communicating with the cylinder, and the other end extending
5 through the heating pipe, and a lubricator cup located in close proximity to the muffler, whereby oil will be fed through said pipe in a liquid state.

4. In combination with an engine cylinder
10 and exhaust muffler thereof, of a heat radiating pipe having one end projecting a suitable distance within the said exhaust chamber and turned downwardly through which a portion of the exhaust is adapted to pass,
15 said pipe having a downwardly extended portion at its opposite end, terminating a

short distance above the cylinder, a bracket for supporting the lower open end of the pipe at a suitable distance above the cylinder, and an inclined oil supply pipe extending through the heating pipe and in communication with the cylinder, and a lubricator cup attached to the upper projecting end of the oil supply pipe and located in close proximity to the muffler. 20 25

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

CHARLES EDWIN BURNS.

Witnesses:

C. W. STYLES,

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."