(No Model.)

C. W. SHERBURNE.

LUBRICATOR.

No. 266,058. Patented Oct. 17, 1882.

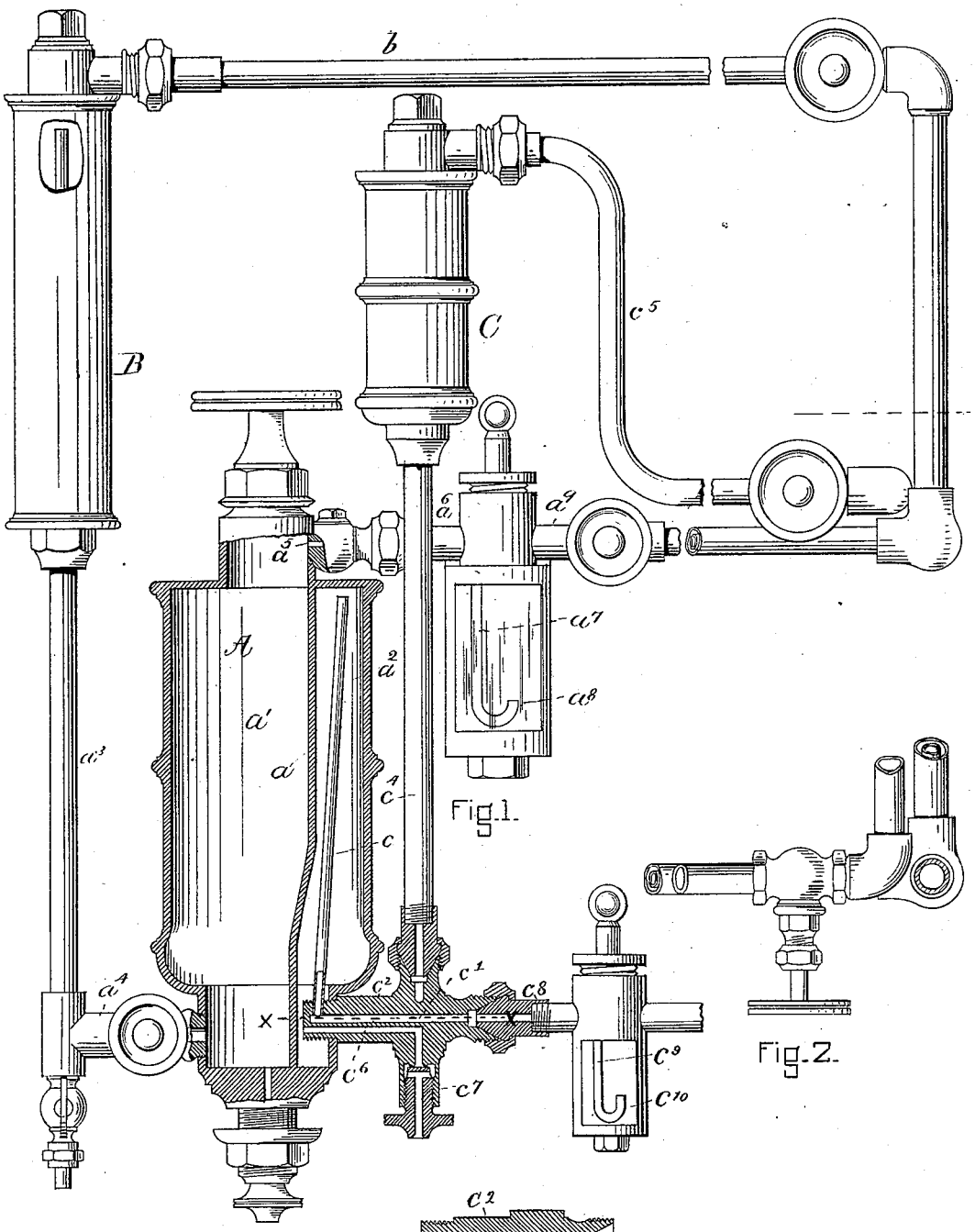

Fig. 1.

Fig. 2.

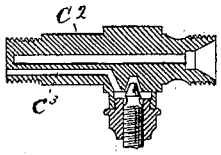

Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES W. SHERBURNE, OF SOMERVILLE, MASSACHUSETTS.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 266,058, dated October 17, 1882.

Application filed April 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. SHERBURNE, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Lubricators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature, in which—

Figure 1 represents in vertical section and elevation my invention. Fig. 2 is a plan view below the line *x x* of Fig. 1. Fig. 3 is a horizontal section on the line *x x* of Fig. 1.

The invention is adapted especially for use on locomotives, although of course it is not confined to that use, for it can be used in connection with a stationary or marine engine, if desired.

The object of the invention is to provide a double lubricator, one portion of which is worked when the principal engine is at rest for the purpose of lubricating some smaller engine, pump, or other device which may continue in operation. Take, for instance, the case of a locomotive. The lubricator ordinarily used upon the locomotive has its condensing-chamber supplied with steam from the dry-pipe. Consequently upon the stopping of the locomotive the steam is shut off and the lubricator ceases to act; and this construction is well enough when the lubricator is simply used for lubricating the cylinders of the engine; but as the engine of the Westinghouse air-brake is generally kept at work while the locomotive is at rest, its cylinders, of course, cannot receive lubrication while the locomotive is at rest if the steam-supply is shut off from the condensing-chamber. Yet it is very desirable that the cylinders be lubricated while the locomotive is at rest, but at the same time it is not desirable that the cylinders of the locomotive be lubricated. To overcome these difficulties I provide my lubricator with two oil-chambers, one of which is connected with a condensing-chamber receiving steam from the dry-pipe, and the other of which is connected with a condensing-chamber receiving steam from the steam-dome. Of course these oil-chambers may be entirely separated from each other and be distinct vessels, if desired; but for the purposes of economy of construction and space I prefer to use the construction herein indicated, which consists in dividing the ordinary oil-chamber by a partition into two chambers, one of which shall contain oil for lubricating the cylinders of the locomotive and the other of which shall contain oil for lubricating the cylinders of the air-pump, or for any other purpose.

Referring to the drawings, A represents the receptacle or cup for containing the oil. It is divided by the partition *a* into the chambers a' a^2. The chamber a' is connected with the condensing-chamber B by means of the pipes a^3 a^4, and the condensing-chamber B is connected with the dry-pipe of the boiler by means of the pipe *b*. The chamber A is connected with a "sight-feed," so called, being a visible feed of drops of oil conveyed through water, such as is described in the Gates Letters Patent No. 138,243, by means of the passage a^5 in the pipe a^6. This passage opens into the passage in the bent tube a^7 within the transparent chamber a^8, whereby the oil is fed to near its bottom. From this chamber a^8 the oil passes up through water or other transparent medium to the pipe a^9, by which it is conveyed to the dry-pipe. The chamber a^2 has the pipe *c*, which extends very nearly to the top thereof, and is open at its top, and is connected at the bottom with the passage c' in the pipe or connecting-piece c^2. The passage c' is connected with another drop-feed, substantially like that already described, and is represented by c^{10}, the bent tube inside by c^9. From the drop-feed the oil, by suitable piping, is conveyed to the places where needed. The oil-chamber a^2 is connected with the condensing-chamber C by means of the passage c^3 in the pipe c^2 and the pipe c^4, which opens into said passage c^3; and the condensing-chamber C is connected with the steam-dome by means of the connecting-pipe c^5. The pipe or connecting-piece c^2 also has the passage c^6 controlled by a valve, c^7, for removing or draining the water from the oil-chamber when necessary. The lubricant has, of course, suitable controlling-valves for closing and opening the passage between the condensers and the oil-chambers, between the sources of steam-supply and the condensers, and between the sight-feeds and the places where the lubricant is used, and also suitable means for filling the oil-chambers and the sight-feed chambers with water, and the oil-chamber a' has means for draining it.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a lubricator, the combination of the oil-chambers a' a^2, two sight-feed devices, two condensers, one of which is connected directly with the boiler or steam-dome, and connecting-piping, as specified, all substantially as and for the purposes described.

2. A sight or visible feed lubricator having one oil-supply cup separated internally into two chambers and connected with condensing-chambers, and adapted to receive steam from two distinct sources and to lubricate two independent machines, all substantially as and for the purposes described.

3. In a lubricator, an oil-supply cup divided by a partition into two chambers, each chamber being attached or connected with a separate condensing-chamber, substantially as and for the purposes set forth.

4. In a lubricator, two sight or visible feed chambers connected with separate chambers of a single oil-supply cup, substantially as and for the purposes set forth.

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Witnesses:
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