J. G. BARRINGTON.

Lubricator.

No. 221,274. Patented Nov. 4, 1879.

Fig. 1.

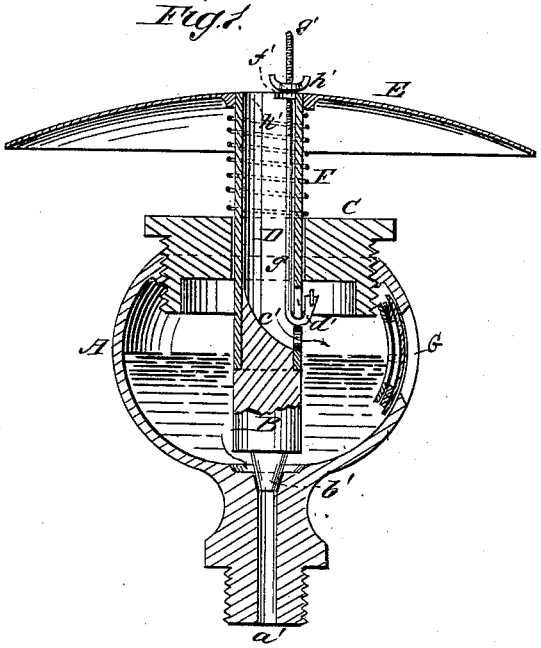
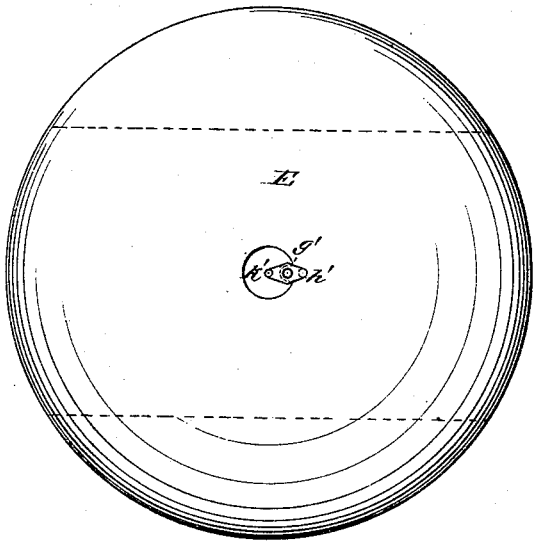


Fig. 2.



WITNESSES:

Francis McAndle

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UNITED STATES PATENT OFFICE.

JOHN G. BARRINGTON, OF NORTH SIDNEY, NOVA SCOTIA.

IMPROVEMENT IN LUBRICATORS.

Specification forming part of Letters Patent No. **221,274**, dated November 4, 1879; application filed July 25, 1879.

To all whom it may concern:

Be it known that I, JOHN G. BARRINGTON, of North Sidney, in the county of Cape Breton and Province of Nova Scotia, have invented a new and Improved Lubricator, of which the following is a specification.

Figure 1 is a sectional elevation of the device. Fig. 2 is a plan of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved oil-cup or lubricator for those parts of machines and machinery that have a reciprocating upward and downward movement.

The invention consists of a globular cup provided with an interior vertical valve and a screw-cap carrying a tube that is provided with a regulating spring and rod, and of a concave plate of sheet metal attached to the top of the tube, the resistance of which to the air as the machinery to which it is attached moves up and down operates the device.

In the drawings, A is the globular cup, provided with hole a' for the escape of the lubricant. B is the valve, pointed at the lower end to fit the valve-seat b', and beveled on the upper end at c', so that no oil may remain on top of it within the tube. C is the screw-cap, through the center of which passes the tube D, that is movable vertically. This tube embraces and holds the valve, and is provided with a slot, d'. E is the concave plate, rigidly fixed around the top of the tube. It is provided with a lug, f', down through which the hooked rod g' passes into the tube. The hook of the rod projects out of the slot d' in the tube. Around the tube, between the concave plates and the screw-cap, is a spiral spring, F. The tension of the spring F is determined by screwing in or out the cover or screw-cap C, and in operating this device the first thing to be done is to set the spring so that it will nearly lift the valve B off its seat b'; then the device will be ready to attach to any part of the machinery having an up-and-down motion.

On the downward movement the pressure of the air against the concave surface of the plate E lifts the valve and permits oil to escape through the hole a'. On the upward movement the air-pressure on the plate causes the valve to close.

The rod g' can be vertically adjusted by turning the nut h', and its function is to prevent the valve from lifting too high from its seat. Hence it is ordinarily screwed down so as to have its hooked end nearly in contact with the beveled face of the valve.

The combined weight of the plate, tube, and valve is such that when the engine or machinery stops the valve closes tightly in its seat.

The concave plate is not necessarily circular, and two of its sides may be cut off, as indicated by the dotted lines, Fig. 2, to enable it to follow in the same space with the cup. Through a side opening, G, which is closed with glass, one can see the contents of the cup. The oil is introduced through the opening k' in the tube.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The within-described lubricator, consisting of cup A, valve B, screw-cap C, tube D, concave plate E, provided with lug f', hooked rod g', and nut h', constructed and arranged substantially as and for the purposes described.

2. The combination of the valve B, beveled on its upper face, c', tube D, provided with slot d', concave plate E, provided with lug f', hooked rod g', provided with nut h', and spiral spring F, substantially as herein shown and described.

3. A lubricator provided with a concave plate on the upper end of its valve-stem, to adapt the valve to be operated by the said concave plate as it moves up and down with the mechanism to which it is attached, substantially as shown and described.

JOHN GASKIN BARRINGTON.

Witnesses:

STEPHEN LOWERY PURVES,

BLOWERS ARCHIBALD.