

(No Model.)

W. R. HOLDER.

TALLOW CUP.

No. 303,282.

Patented Aug. 12, 1884.

Fig. 1.

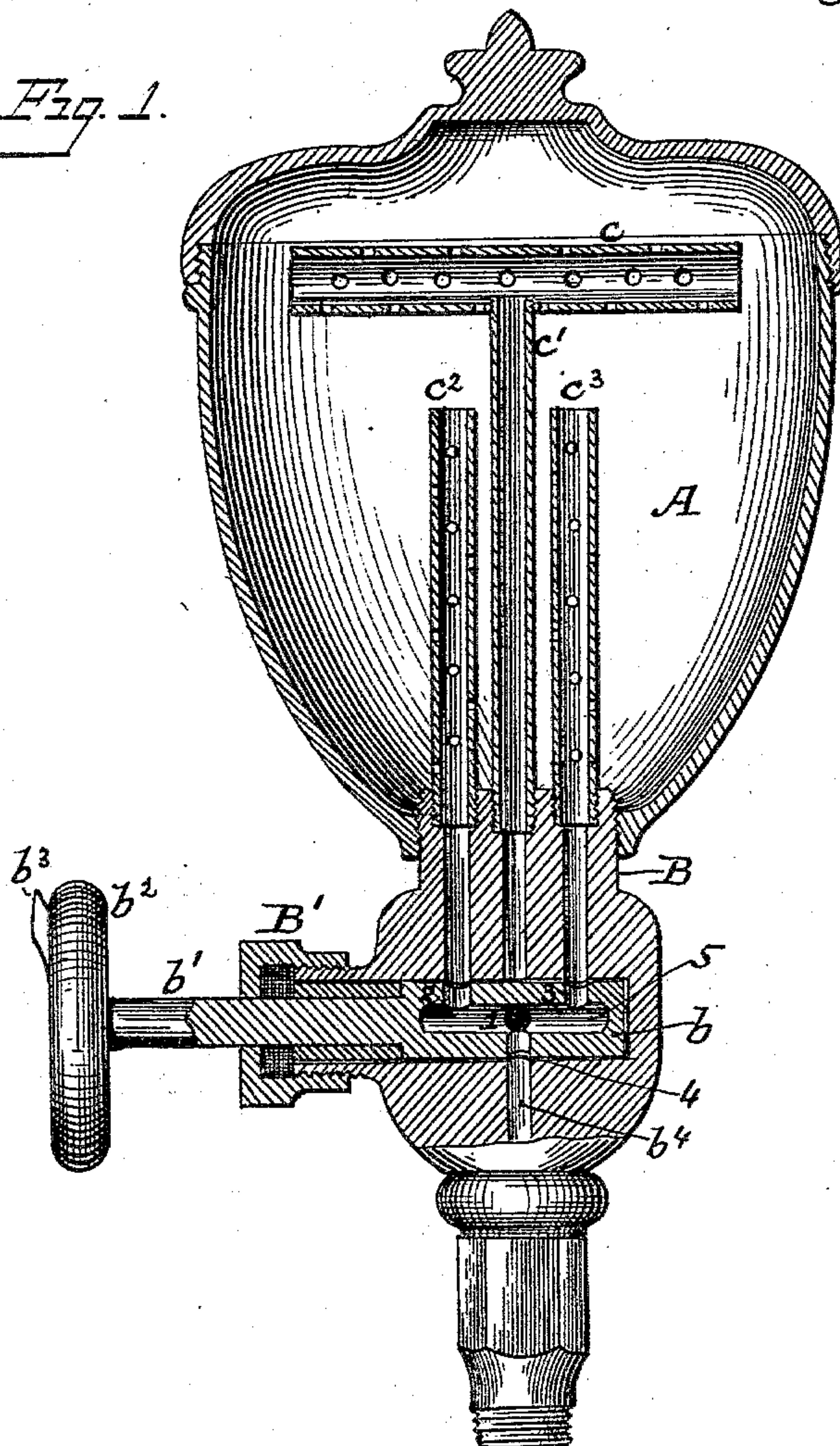
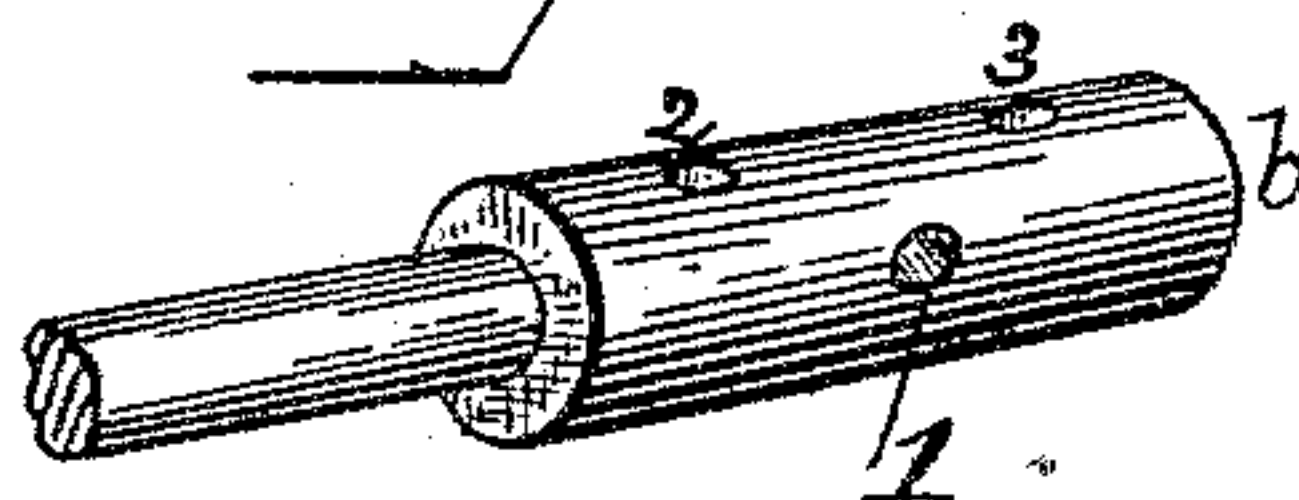


Fig. 2.



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# UNITED STATES PATENT OFFICE.

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## TALLOW-CUP.

SPECIFICATION forming part of Letters Patent No. 303,282, dated August 12, 1884.

Application filed June 14, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM R. HOLDER, a citizen of the United States, residing at Verbena, in the county of Chilton and State of Alabama, have invented certain new and useful Improvements in Tallow-Cups, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a vertical central section of a cup constructed in accordance with my invention. Fig. 2 is a perspective view of the plug-valve thereof.

My invention relates to lubricators, and is especially designed as a tallow-cup suitable for locomotives and stationary engines; and my invention consists in certain features of construction that will be hereinafter described, and specifically set forth in the claims.

The cup is represented at A. It is globular, or slightly in the form of an inverted cone, the lower or narrower end of which is interiorly screw-threaded, and is secured to the upper end of a valve-casing, B, within which is fitted a plug-valve, b, provided with a stem, b', and the latter has mounted thereon a hand-wheel, b<sup>2</sup>, on the side of which is an index, b<sup>3</sup>, to point out the direction of the main passages through the plug-valve. This plug-valve is preferably made a little tapering, so that it can be forced inward within its seat to compensate for any wear of its periphery. The stem b' thereof is made to pass through a gland and stuffing-box, B', to prevent any escape of steam, and to provide for the tightening of the plug-valve within its seat. Said plug is either drilled endwise or cored hollow to form a longitudinal chamber or passage, 5, therein, into which a series of radial passages enter, as follows: A central passage, 1, extends diametrically through the plug or valve, and, when standing vertically, is used for the passage upward of steam to the tallow-chamber, and also for the downward flow of tallow from the upper portion of said chamber while the engine is in operation. But when the engine is running without steam, as while down a grade, the plug is turned a quarter of a revolution, and occupies the position shown in the drawings, allowing the tallow to flow through the passages 2 and 3 in the plug-valve into the body of the latter, and from the latter through the passage 4 into the opening b<sup>4</sup> leading to the steam-chest or to

other parts of the engine. At the upper end of the valve-casing B three vertical pipes, c' c<sup>2</sup> c<sup>3</sup>, are secured into the upper entrances of passages leading to the openings 1 2 3 drilled into the plug-valve. The pipe c' is placed in the center, and at its upper end carries a perforated horizontal pipe, c, through which steam enters the tallow-cup, condenses therein, and causes a corresponding quantity of melted tallow floating upon said condensed steam to flow down the pipe c' and vertically through the plug to the steam-chest. When the supply of steam is temporarily cut off, as when going down a grade, the plug is turned a quarter of a revolution, and occupies the position shown in the drawings. The tallow flows then through the side perforations made in the pipes c<sup>2</sup> c<sup>3</sup>, and through the passages 2 3, chamber 5, and passage 4, to the exit-opening b<sup>4</sup> of the valve, and all impurities in the tallow settle in the bottom of the chamber A without obstructing the flow of clear tallow through the side perforations in the pipes c<sup>2</sup> c<sup>3</sup>. As the plug b can be revolved in its socket so that the openings thereof coincide more or less with the openings in the valve, the amount of tallow delivered can be regulated with great precision.

Having now fully described my invention, I claim—

1. A tallow-cup comprising the receptacle A, a plug-valve provided with a diametrical passage, 1, therethrough, a longitudinal chamber, 5, and passages leading therein, a pipe, c', extending to the top of the cup, and perforated pipes c<sup>2</sup> c<sup>3</sup>, projecting within the interior of the cup, substantially as and for the purpose described.

2. The combination of the cup A, plug-valve secured to the lower end thereof and provided with three passages leading to the plug of said valve, with the pipe c', extending within the cup to the upper portion thereof, the horizontal pipe c, provided with lateral perforations, and the perforated vertical pipes c<sup>2</sup> c<sup>3</sup>, substantially as and for the purpose described.

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

WILLIAM R. HOLDER.

Witnesses:

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