

T. Fleetwood,

Lubricator.

N^o 61,062.

Patented Jan. 8, 1867.

Fig. 1.

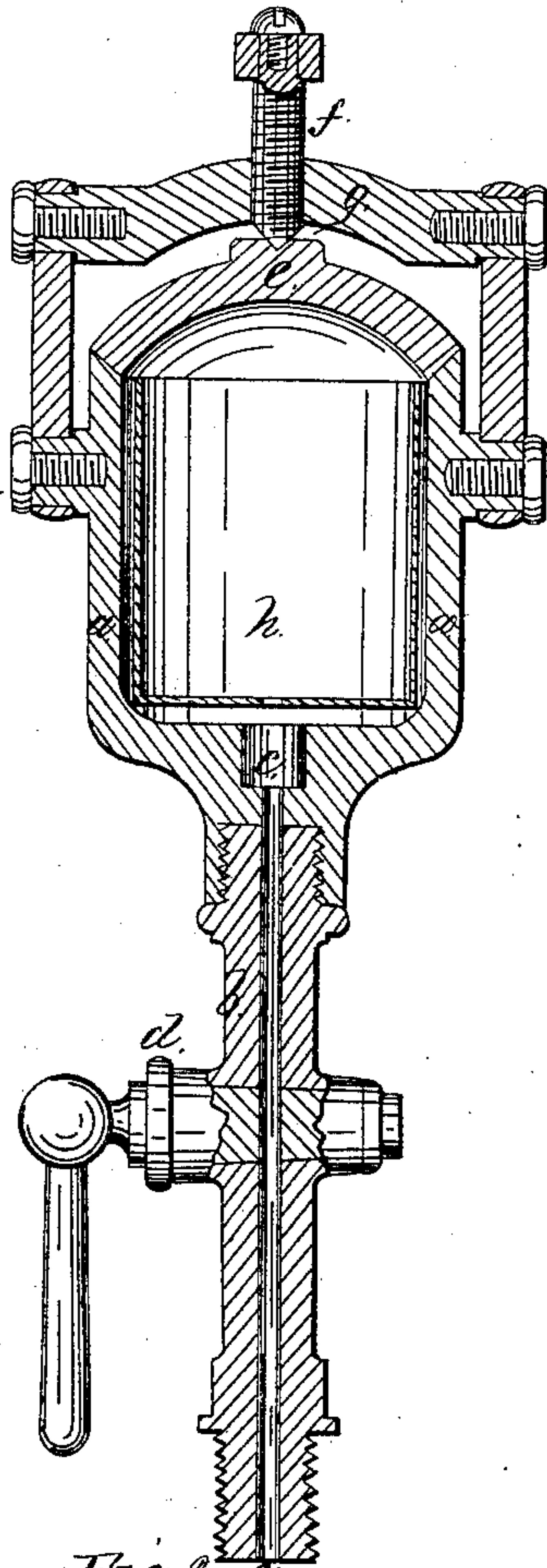
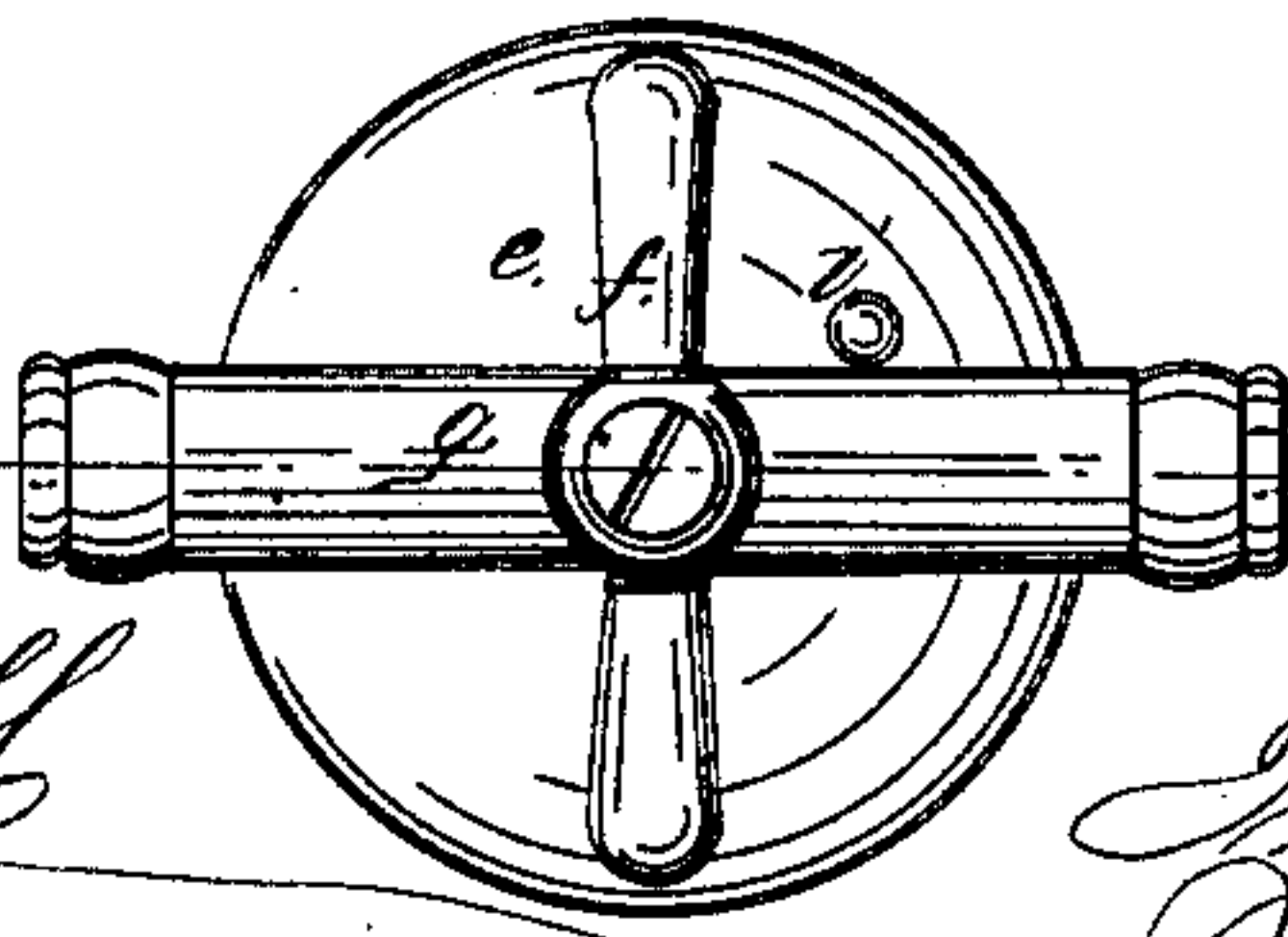


Fig. 2.



Witnesses;

Wm Dean Overell
for Service

Inventor;

Thomas Fleetwood
Per Messrs
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United States Patent Office.

THOMAS FLEETWOOD, OF CARLETON, NEW BRUNSWICK.

Letters Patent No. 61,062, dated January 8, 1867.

IMPROVEMENT IN STEAM-ENGINE LUBRICATING CUPS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, THOMAS FLEETWOOD, of St. John, New Brunswick, have invented a new and improved Self-Rendering Tallow Cup; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal section taken in the line *x x*, fig. 2.

Figure 2 is a plan or top view of the tallow cup.

Similar letters of reference indicate like parts.

This invention is designed to obviate the well-known objection to the use of tallow for lubricating steam cylinders, on account of the gummy matter which accumulates and clogs the action of the piston, even when it has been previously tried out. It consists of a cup for holding raw tallow, which is enclosed in a brass or other metal chamber, to be connected with the steam cylinder in such manner that the tallow in the internal cup shall be melted and fed regularly and gradually into the cylinder. The tallow is placed in the cup in its raw state, and is thus rendered or tried out by the heat of the steam, and only the pure grease passes into the cylinder. By means of a stop-cock the supply of melted tallow is regulated; no more is admitted into the cylinder than is necessary for lubrication, and no gummy matter is formed; besides the advantageous effect in the better working of the piston, there is a great saving of material.

Figure 1 represents a cylindrical metal cup, *a a* being the body of the cup, which is connected at the bottom part with a stem, *b*, screwed into it, through which a channel, *c c*, passes from the interior of the cup. The stem *b* has a screw on the end to fasten it to a steam cylinder, and is provided with a stop-cock, *d*. A cover, *e*, is fitted steam-tight in a seat like a poppet-valve on the top of the cup *a a*; it is held firmly in place by a set-screw, *f*, running through a cross-bar, *g*, which is pivoted to the sides of the cock *a a*, and swings upon it like a bail on a water pail. A tin cup, *h*, is fitted within the cup *a a*, for holding the raw tallow. The bottom is perforated with one or more holes for the escape of the melted tallow. On the top of the cover *e* is a stud or boss, *i*, for lifting it with. When the tallow cup is attached to a cylinder the internal cup *h* is filled with raw tallow and the cover *e* fastened down tight in its seat by the set-screw *f*. The stop-cock *d* is opened to admit the melted tallow through the channel *c c* into the cylinder, and is allowed to remain open, say for fifteen or twenty minutes, or until the cylinder is well lubricated; it is then closed for two or three hours, or until the cylinder again requires lubrication. Attention on the part of an engineer in opening and closing the stop-cock to admit or cut off the supply of the melted tallow as needed, is all that is necessary for keeping a steam cylinder entirely free of gum and in perfect working order by this method of lubricating with raw tallow.

Having described the construction and operation of my invention, what I claim as new, and desire to secure by Letters Patent, is—

A self-rendering tallow cup for lubricating steam engines, constructed and operated substantially in the manner herein described.

THOMAS FLEETWOOD.

Witnesses:

GEORGE OXLEY HUESTIS,
EDWARD D. GORE.