## Stuber & Harden. Locomotive Head Light. No Patented C

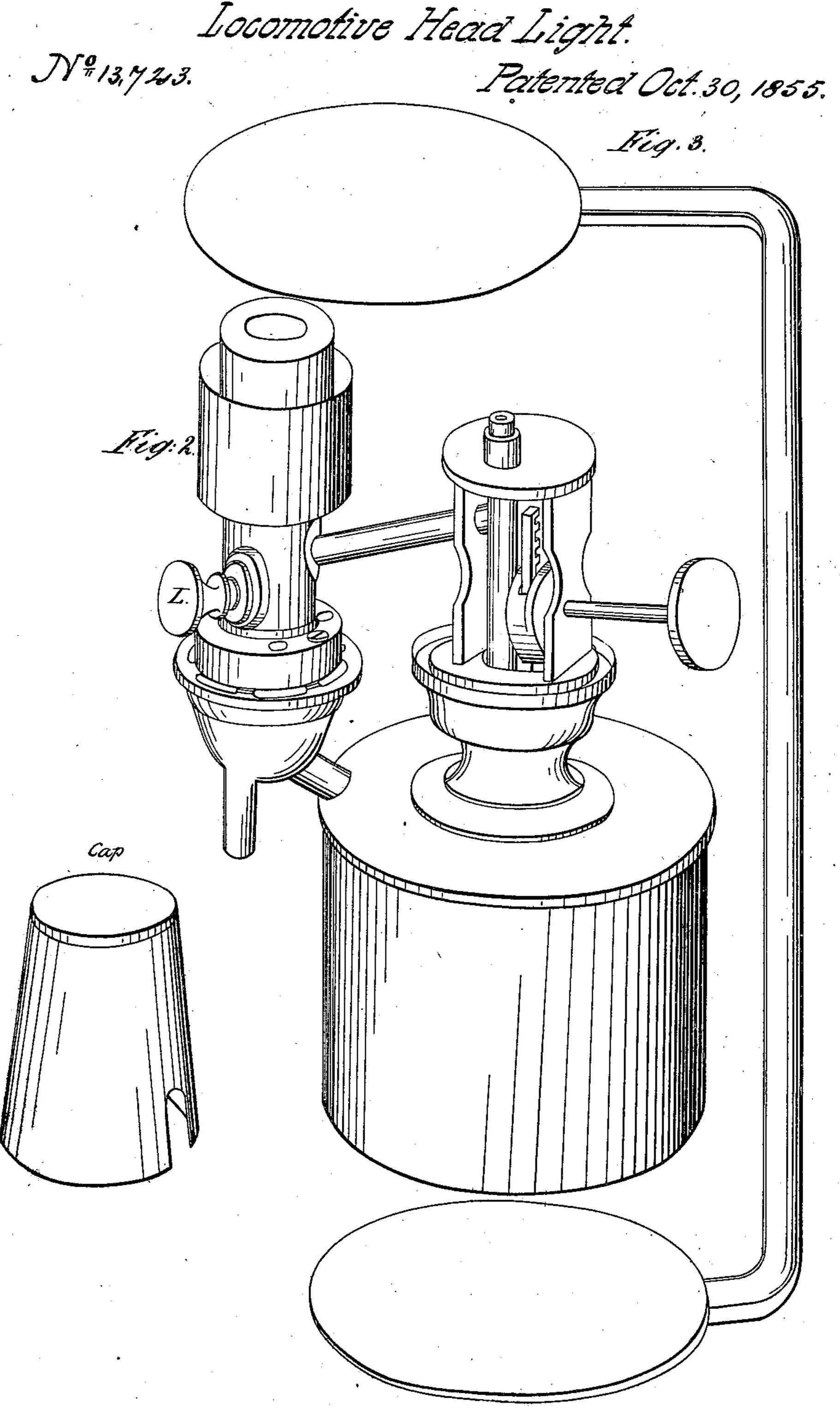
Paterned Oct. 30, 1855.

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Section

Fig. 1
Section

## Stuber & Harden. Locomotive Head Light.



## UNITED STATES PATENT OFFICE.

J. STUBER AND T. HARDEN, OF UTICA, NEW YORK.

## LAMP.

Specification of Letters Patent No. 13,723, dated October 30, 1855.

To all whom it may concern:

Be it known that we, John Stuber and | H, in said drawing. THOMAS HARDEN, of the city of Utica, county of Oneida, and State of New York, have 5 invented a new and Improved Locomotive-Lamp and a Burner for the Same and Which May Be Applied to any Kind of a Lamp; and we do declare the following is a full and exact description thereof, refer-10 ence being had to the accompanying drawing and the letters marked thereon.

The nature of our invention consists of combining economy in the use of oil, and keeping the same heated to a proper tem-15 perature for burning in the winter season, and making the highest light for the quantity of material consumed of any lamp now

in use.

To enable others skilled in the art to make 20 and use our invention, we will proceed to describe its construction and operation.

The lamp consists of a cylindrical oil chamber, marked A, in the annexed drawing, Figure 1 (which is a sectional or inte-25 rior representation of our lamp); in this oil chamber is a valve, marked B, in said drawing, which when held in its place by the spiral spring a, a, a, &c., fits closely into the oil chamber and presses upon the oil and 30 forces the oil up into the feeding pipe, marked C, C, in said drawing. In the perpendicular portion of the feeding pipe is a pin or rod, extending nearly to the bottom thereof, and filed on one side beveling and 35 leaving a cavity between the pin or rod and the outside of the pipe, largest at the bottom and growing gradually smaller until it reaches the horizontal portion of the feeding pipe, thereby regulating the quantity of 40 oil fed to the lamp, which may be made greater or diminished by moving this pin or rod up or forcing it down, which said pin or rod is marked D, in said drawing.

E, in said drawing represents the tube 45 for the wick and is surrounded with a cavity for the wick and the oil which is supplied from the feeding pipe C, connected therewith.

G, in said drawing represents a basin or 50 dish in which the oil escaping over the top of the wick and tube containing the same is caught and which is conveyed back into

the oil chamber through the pipe marked

I I, in said drawing represents the key 55 and geared rod by which the spiral spring is regulated and its pressure upon valve B, relieved. The valve B, is made of leather and when not forced down upon the oil, by the pressure of the spiral spring upon it, 60 collapses and allows the oil to find its way into the oil chamber below it. K in said drawing represents the cap, covering the top of the oil chamber and its appendages.

F in said drawing represents the burner 65 which is cylindrical in form with an oval shaped top, perforated with a hole, the circumference of which is about equal to one half of the outer circumference of the burner. This burner is fastened to the wick 70 tube, leaving an opening or aperture at its bottom for the air to pass through and is regulated by a screw and slide by which it is fastened to the wick tube. The wick is regulated by screw L in said drawing.

Fig. 2 of said drawing is a representation of our lamp, complete so far as the same can

be shown in the perspective.

Fig. 3 of said drawing represents an apparatus for heating the oil to a proper tem- 80 perature to burn freely, and is a winter attachment for our locomotive lamp.

It is composed of two circular plates of copper, one immediately over the chimney, and the other under the cylindrical oil 85 chamber and are connected together by a copper rod. The upper plate takes the heat from the lamp chimney and it is conveyed by means of the connection to the lower plate, upon which the oil chamber stands.

What we claim as our invention and de-

sire to secure by Letters Patent is—

1. The use of tube H, connecting the drip cup G, with the reservoir A, in the manner described for the purpose specified.

2. Also the arrangement of tubes C, C, in combination with the rod D, in the manner described, for the purpose specified.

> JOHN STUBER. THOMAS HARDEN.

Witnesses:

DEXTER GILMORE, J. G. Hutchinson.