J. J. THOMAS, Dec'd., S. THOMAS, Admr'x.

Lamp.

No. 207,460 Patented Aug. 27, 1878.

Fig. 1.

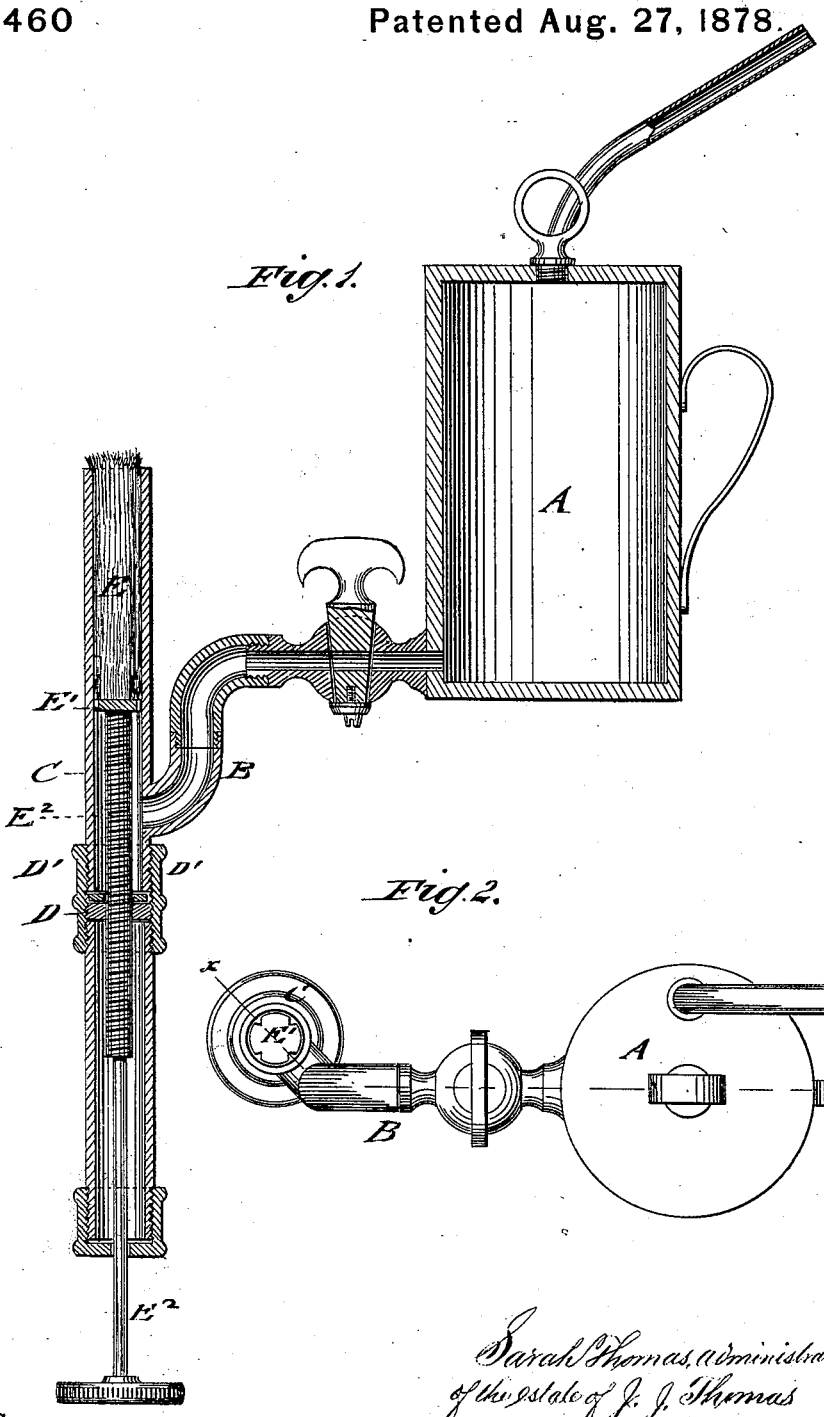

Fig. 2.

WITNESSES:

Francis Mc Ardle.

C. Sedgwick

Sarah Thomas, administratrix of the estate of J. J. Thomas

INVENTOR:

Deceased

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

SARAH THOMAS, OF YOUNGSTOWN, OHIO, ADMINISTRATRIX OF JOHN J. THOMAS, DECEASED.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **207,460**, dated August 27, 1878; application filed July 23, 1878.

To all whom it may concern:

Be it known that JOHN J. THOMAS, of Youngstown, in the county of Mahoning and State of Ohio, did invent a new and Improved Safety-Lamp, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section of the improved safety-lamp on line *x x*, Fig. 2, and Fig. 2 a plan view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish, for use in rolling-mills, saw-mills, and manufacturing establishments in general, an improved lamp that is not liable to explosion, so as to expose the building to the danger of fire, and in which the oil is supplied from a central reservoir of considerable capacity, the oil being forced into the different burners, and thereby the carrying of the lamps by the workmen prevented.

The invention consists of a number of burners that are supplied from a central reservoir, the burners being adjusted by a notched piston, operated by a screw-spindle turning in a fixed and tightly-packed partition of the supply-tube.

Referring to the drawing, A represents an oil-reservoir of suitable size, which is placed at such height in the building to be lighted as to force the oil to every burner connected therewith.

The reservoir may be made large enough to take up a barrel of oil or more, and is connected by main and branch pipes B, having suitable stop-cocks, to a number of burners, C, of which as many as are required are arranged in the building.

The burner C consists of two tubular sections, which are separated by a dividing partition, D, and connected by a screw-sleeve, D′. The upper section or supply-tube of the burner is connected with the supply-pipe B, while the lower tube is closed by a bottom screw-cap.

The wick E is secured to the piston E^1, which is notched at the circumference, so as to admit the passage of oil to the wick. The wick and piston are adjusted by means of a screw-spindle, E^2, that turns in the dividing partition D of the burner. The spindle is extended below the bottom guide-cap and turned by means of a milled head at the lower end. The dividing partition is tightly packed by means of a leather or other washer to prevent any leakage of oil from the upper to the lower tube section. The connection of the upper and lower burner-sections by the screw-sleeve D′ admits their detaching from each other for cleaning the burner-tubes.

The pressure of the oil in the reservoir keeps up a continuous supply of oil to the burners, which are fixed permanently in the shop, so as to prevent their being carried about by the workmen, and thus exposing the building to the danger of fire.

The central reservoir is placed outside of the building, and may be charged with oil of any kind, whether explosive or not, which is conducted by the pipes to the burners, and burned without any danger of upsetting or exploding. Thus a lighting device that combines safety with economy of oil is furnished for manufacturing establishments and shops of all kinds.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

In a safety-lamp, a burner supported from a central reservoir and constructed of an upper wick-tube and of a lower guide-tube, separated by a tightly-packed partition, in connection with a notched wick-adjusting piston, adjusted by a screw-spindle, substantially as and for the purpose set forth.

SARAH THOMAS,
Administratrix of John J. Thomas.

Witnesses:
MATHEW LOGAN,
D. H. EVANS.