

E. J. Toof

Wick-Regulator.

N^o 75318

Patented Mar. 10, 1868

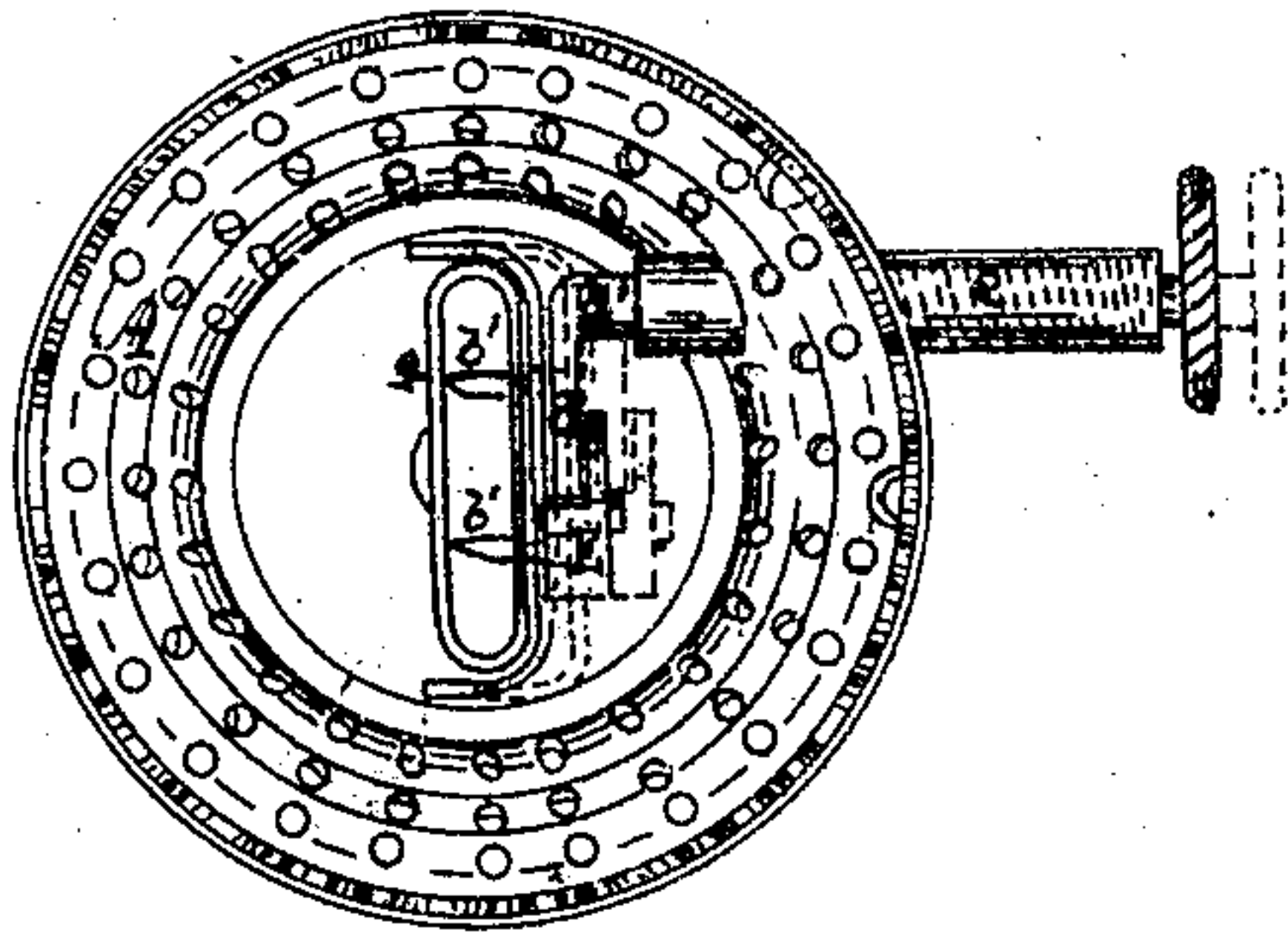


Fig. 1

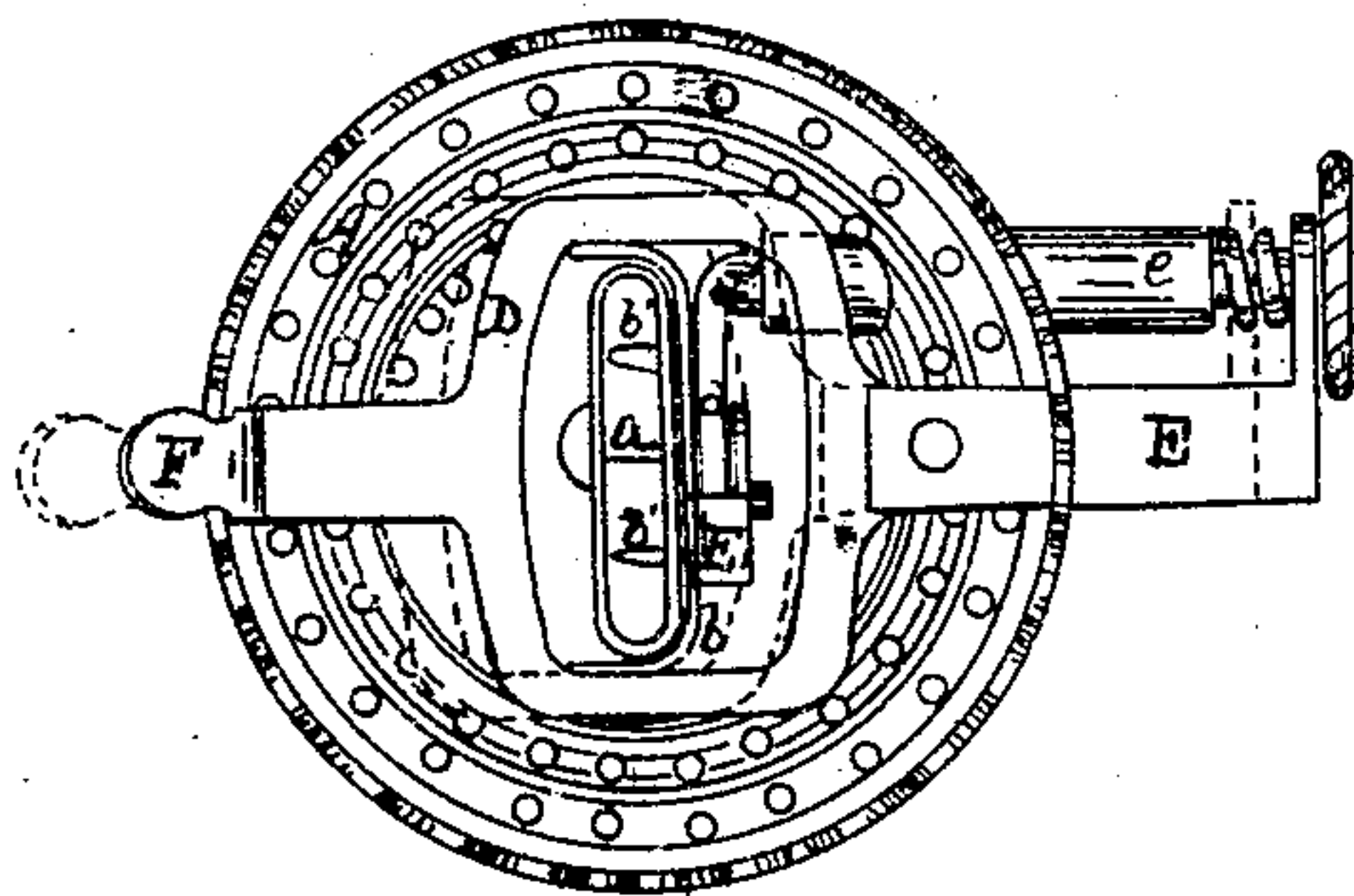


Fig. 3.

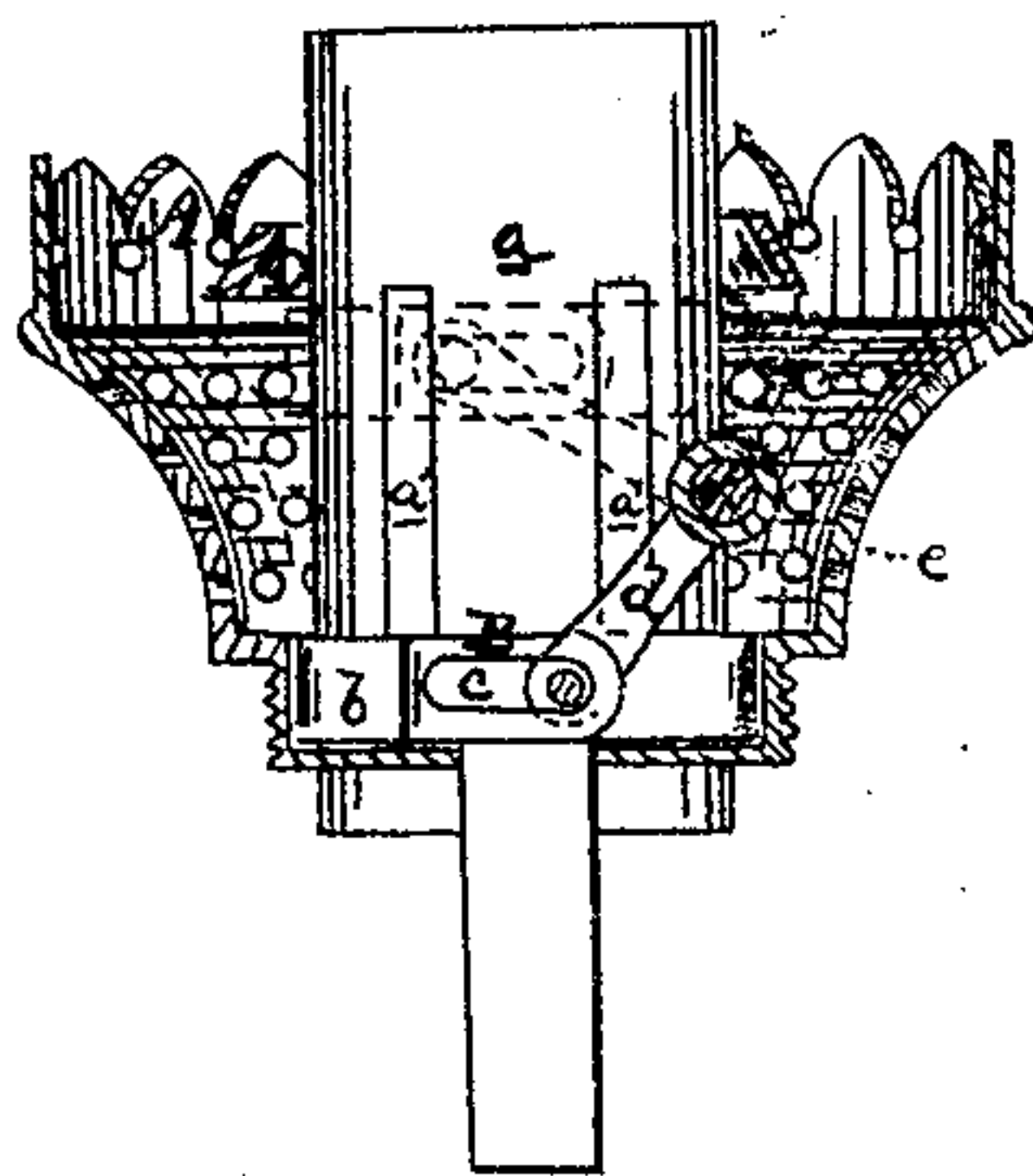


Fig. 2.

Witnesses.

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EDWIN J. TOOF, OF FORT MADISON, IOWA.

Letters Patent No. 75,318, dated March 10, 1868.

IMPROVEMENT IN WICK-REGULATOR.

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, EDWIN J. TOOF, of Fort Madison, in the county of Lee, and State of Iowa, have invented a new and useful Improvement in Lamp-Wick Regulators; and I do hereby declare and make known that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and the letters and figures marked thereon, which form part of this specification.

My invention consists of a novel device, whereby the wicks of lamps may be raised or lowered, as required, by a simple and cheap mechanical arrangement, and also in combining therewith a clasp, for securing the chimney upon the burner of the lamp.

To enable those skilled in the art to understand how to construct and use my invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawings, in which—

Figure 1 represents a plan or top view of my invention.

Figure 2 is a side view thereof, and

Figure 3 is a plan or top view of the same, with the chimney-clasp attached.

Similar letters of reference, in the several figures, denote the same parts of my invention.

A represents the lamp-burner, and *a* the ordinary flat wick-tube, which contains the wick. In one side of the tube are cut longitudinal slots, marked *a' a'*, as seen in fig. 2, through which project, so as to penetrate the substance of the wick, points *b' b'*, which are attached to a band or semi-band partially surrounding the wick-tube, marked *b*. This bar or semi-band *b* is provided with a flange, turned down parallel therewith, marked B, which is provided with a horizontal slot, marked *c*, as seen in fig. 2. Between said barrel *b* and flange B is an arm or crank, *d*, of a shaft, *d'*, which passes out of the burner, and is provided with a knob, whereby it may be rotated, as desired. This crank turns and passes through the aforesaid slot *c*, so, it will readily be seen, the rotation of said shaft raises or lowers the band or semi-clasp *b*, and consequently the wick, as desired. The said shaft *d'* passes through a cylinder, *e*, within which is arranged a spiral spring, which is provided with points of resistance, in such a manner as to cause said spring to press the band *b* against the tube *a*, and the points *b' b'* into the wick, while, at the same time, by drawing out said shaft *d'*, the spring yields, and permits the points *b' b'* to be withdrawn from the wick.

In case the chimney-clasp should not be attached, then the spring aforesaid may be used or not, as preferred, as it is obvious that it is not necessary to the successful operation and manipulation of the regulator.

D represents a ring, arranged about the wick-tube, provided with an arm, E, which the shaft *d'* passes through, and against which one end of the spring within the tube or cylinder *e* rests. It is also provided with an arm, F, which is provided with a clamp, so that the chimney may be placed in position by pressing it outward, but which is thrown inward by the action of the aforesaid spring, and clamps the chimney in place, as desired. The said spring, however, might even then be arranged in a different position, and yet produce the same result, as, should the band *b* surround the wick-tube, the spring might be arranged between said tube, and the band *b'* on the opposite side from the shaft, and would operate equally as well.

It is obvious also that, should the shaft *d'* be fulcrumed at the point where it passes through the case of the burner, the wick could be operated upon by the lever into which said shaft would be converted by lowering or raising the exterior end of the lever.

It may also be observed that the ends of the semi-clasp *b* may be turned in upon the opposite side of the wick-tube, this itself forming a spring to operate for the purposes above mentioned, that is, for the purpose of holding the points *b' b'* into the wick.

Having described the construction and operation of my invention, I will specify what I claim, and desire to secure by Letters Patent.

1. I claim, in combination with a wick-tube, provided with vertical slots *a' a'*, the arrangement of a slide, *b*, upon the outside of the tube, provided with points *b' b'*, projecting into said tube through said slots, so as to operate in the manner and for the purposes described.

2. I claim the combination of the slotted wick-tube *a*, the slide *b*, provided with points *b' b'*, and the shaft *d'*, or its equivalent, arranged and operating substantially as and for the purposes set forth.

3. I claim the arrangement of a spring, in combination with the above, operating as and for the purposes set forth.

4. I claim the combination of the tube *a*, slide *b*, shaft *d'*, and springs, with the chimney-clamp D E F, as and for the purposes specified.

E. J. TOOF,

Witnesses:

W. E. MARRS,

E. C. BEALS.