

(No Model.)

A. L. BARON & J. F. HAFLEY.
LANTERN.

No. 602,206.

Patented Apr. 12, 1898.

Fig. II.

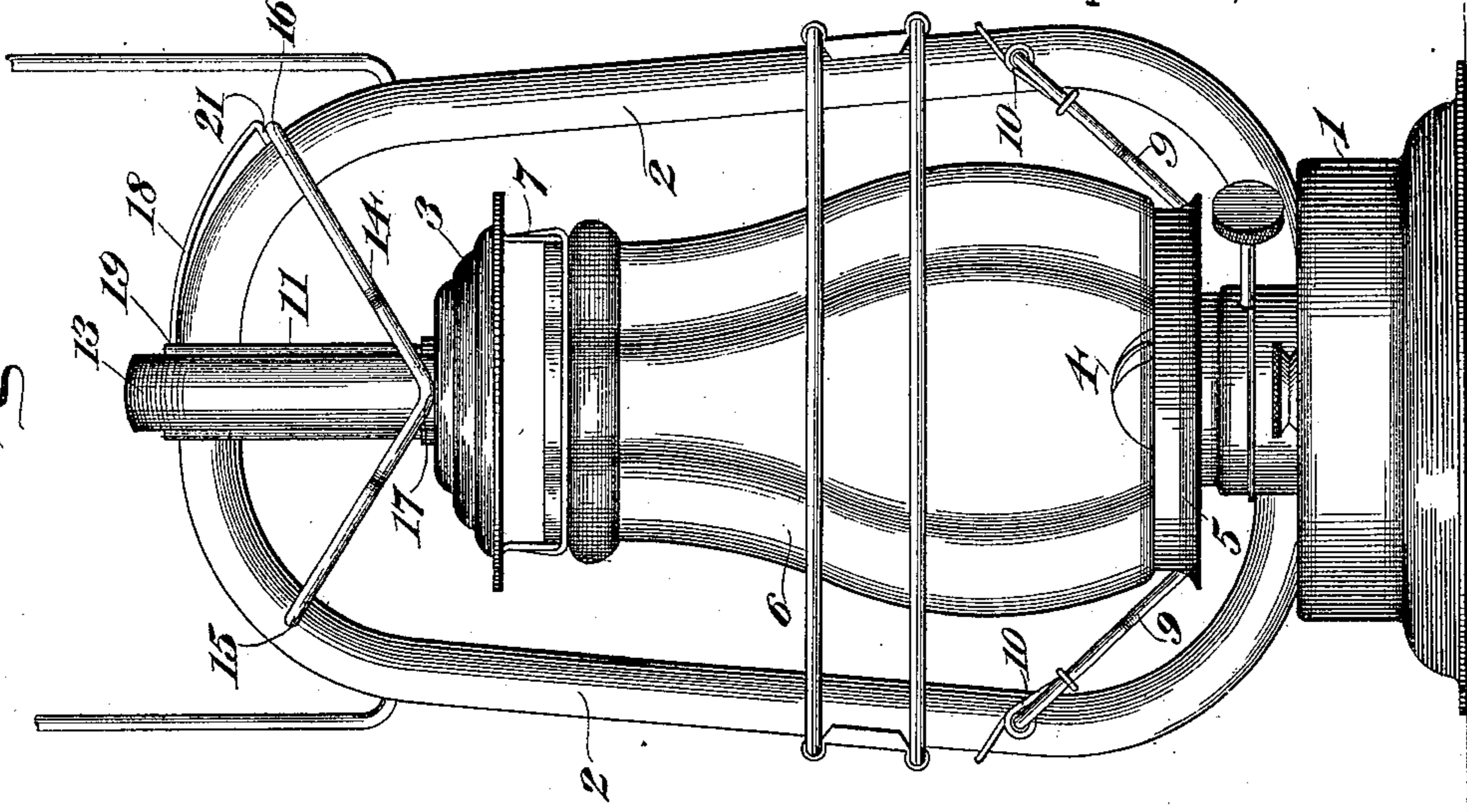


Fig. III.

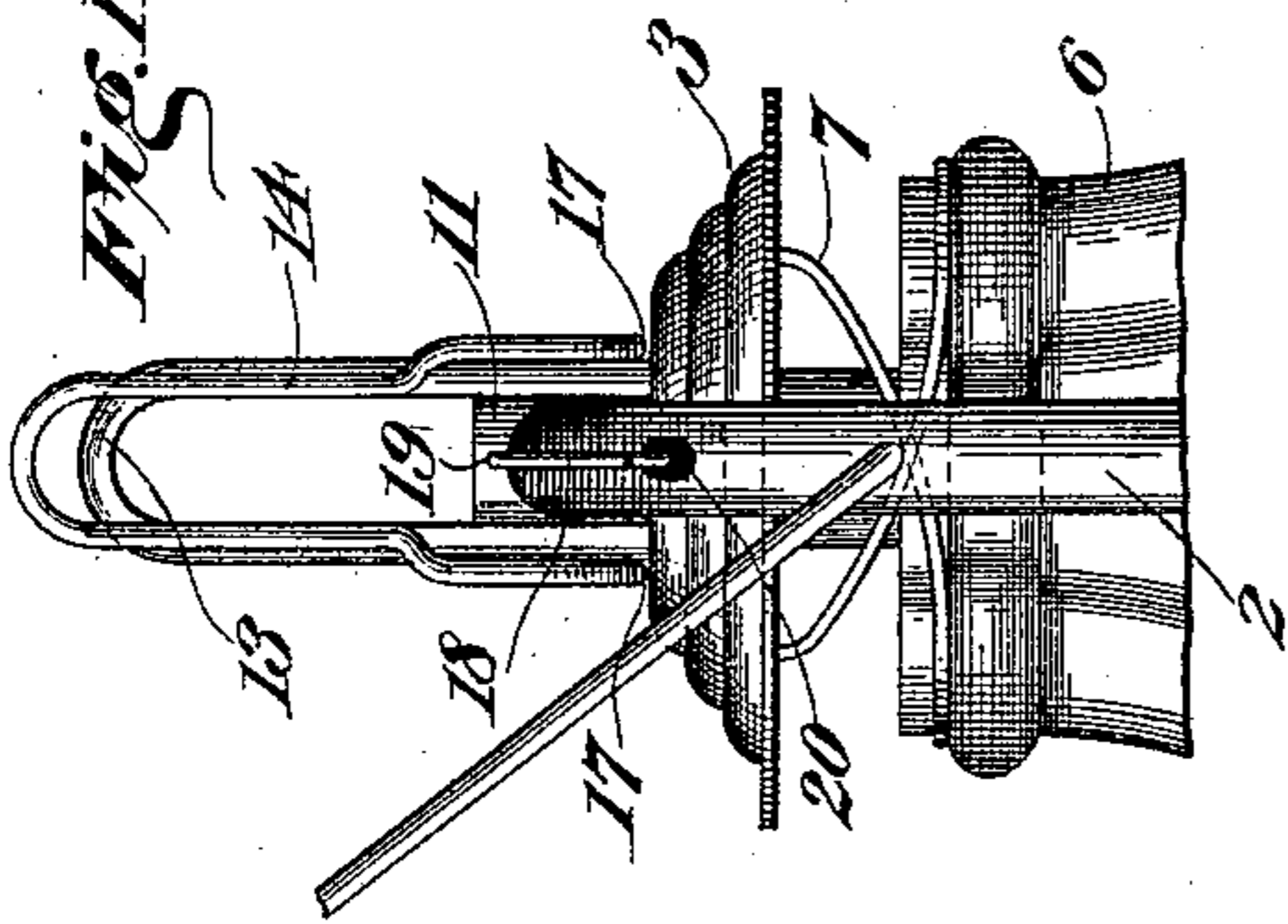


Fig. IV.

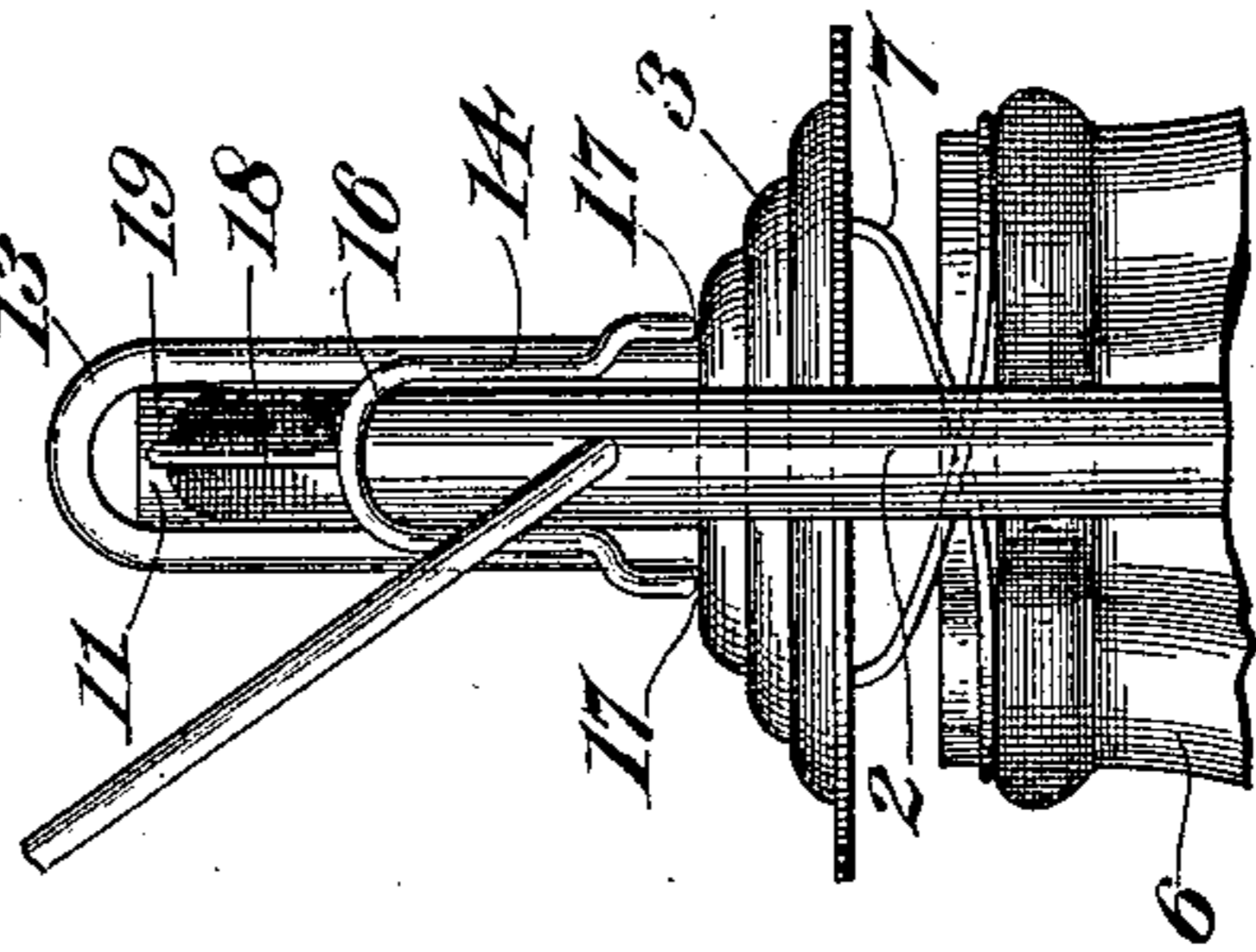
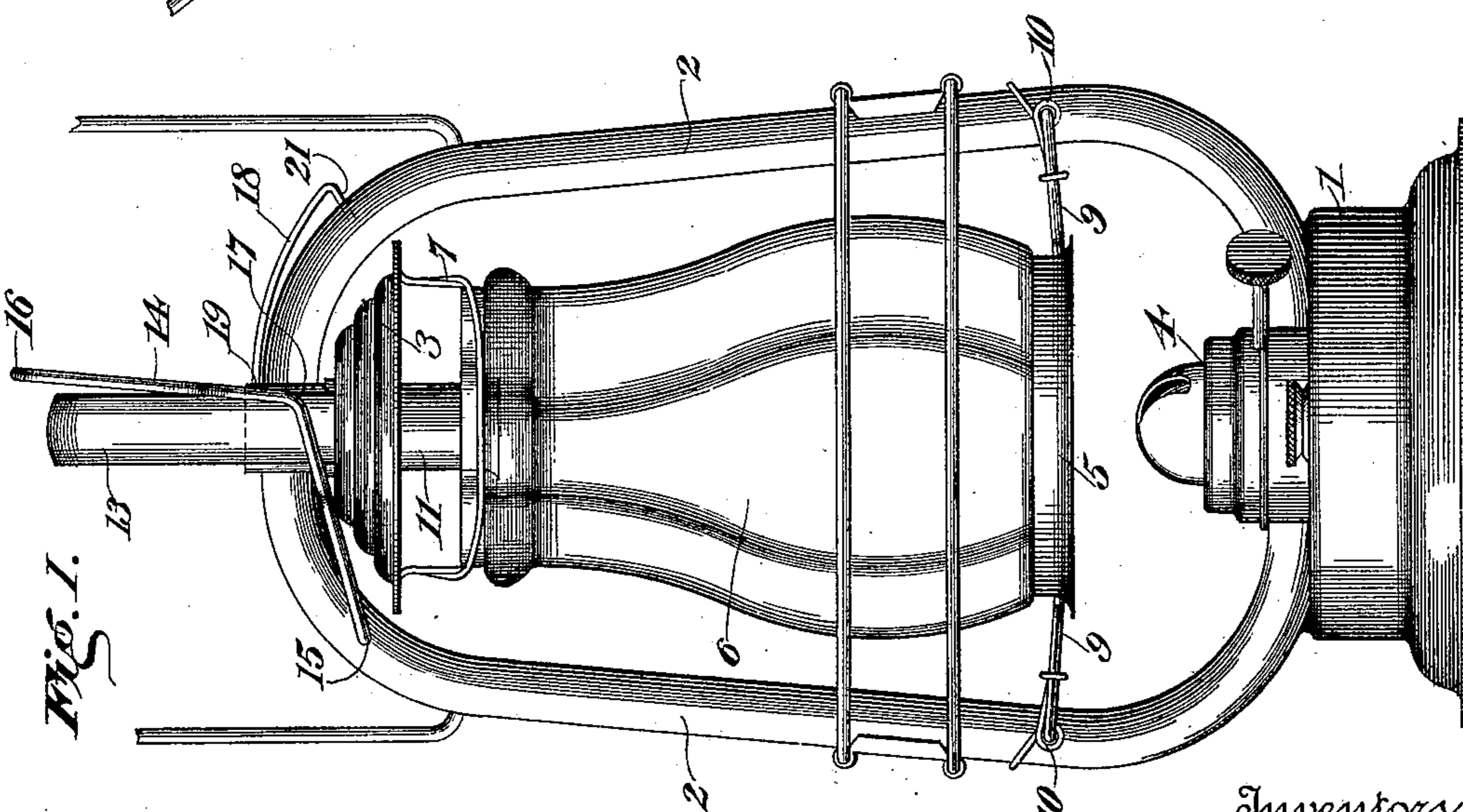


Fig. I.



Witnesses:

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UNITED STATES PATENT OFFICE.

ALFRED L. BARON AND JAMES F. HAFLEY, OF TIFFIN, OHIO; SAID HAFLEY
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LANTERN.

SPECIFICATION forming part of Letters Patent No. 602,206, dated April 12, 1898.

Application filed March 8, 1897. Serial No. 626,489. (No model.)

To all whom it may concern:

Be it known that we, ALFRED L. BARON and JAMES F. HAFLEY, of Tiffin, in the county of Seneca, State of Ohio, have invented certain
5 new and useful Improvements in Lanterns, of which the following is a complete specification, reference being had to the accompanying drawings.

Our invention relates particularly to tubular lanterns, particularly of the type shown,
10 for example, in Patent No. 345,100, issued July 6, 1886, to the said Alfred L. Baron and William T. Rufer.

The object of our invention is to produce
15 improvements in means for confining the globe and globe-supporting mechanism in the depressed position, the manipulating and securing mechanism of which is located away from the parts which become heated in use—
20 that is to say, away from the direct line of ascent of the products of combustion from the burner of the lantern.

In the accompanying drawings, Figure I is a side elevation of a lantern equipped with
25 our device, showing the globe in the elevated position. Fig. II is a similar view showing it secured in the depressed position. Fig. III is a view of a portion of the upper part of the lantern, taken at right angles to Fig. I.
30 Fig. IV is a similar view taken at right angles to Fig. II.

Referring to the figures on the drawings, 1 indicates the base, 2 the air-tubes, and 3 the canopy, of a tubular lantern of any ordinary
35 or preferred construction.

4 indicates the burner; 5, the globe-supporting plate; 6, the globe; and 7 the globe-retaining members that secure the upper part of the globe in fixed relations to the canopy.

40 The globe-supporting plate 5 is normally supported in the elevated position, as by arms 9, pivoted to the tubes, respectively, and actuated, as by springs 10, substantially in the manner described in the patent above referred to.

The canopy 3 is illustrated as movably secured around a tube 11, which depends from the tubes 2 at their juncture above the burner

4. It is held in the horizontal position and movably secured within fixed limits to the
50 tube, as by means of a hood 13.

All of the parts above described are, as illustrated, of well-known construction, or they may be of any preferred construction.

Our present invention, as above suggested,
55 consists in mechanism that is adapted to depress and secure the globe to its supporting mechanism as against the force of the springs 10, without the necessity of touching a highly-heated portion of the lantern. 60

In the patent above referred to mechanism for securing the globe and supporting parts in the depressed position is shown; but to operate it it is necessary to manipulate the canopy or other portion of the lantern which
65 becomes heated in use. Such means, therefore, while well adapted for the purpose of securing the parts, can be operated with comfort and facility only when the lantern is cold.

We illustrate a preferred form of mechanism
70 for accomplishing the above-specified object, which consists of a lever 14, pivoted to a fixed portion of the lantern—as, for example, one of the tubes, as indicated at 15. The lever is operatively connected with the supporting
75 mechanism of the globe and projects, as to its free end 16, to a point remote from the ascending currents of heat from the burner—for example, across to the other tube of the lantern, where means for securing it, so as to
80 hold the globe in the depressed position, are provided. The lever 14, as illustrated, is a bell-crank lever and is bifurcated or bent into the shape of a loop, so that its two ends are pivoted to one of the tubes, its loop or
85 free end 16 overlapping the other tube, while the angular faces 17 of its two sides that constitute the bell-crank form ride cam-like against the surface of the canopy 3.

If the canopy 3 is in the elevated position,
90 the operator, by downward pressure upon the free end 16, causes the lever to turn upon its pivot 15 and, forcing the angles 17 against the surface of the canopy, depresses the canopy, globe, and globe-plate against the resist-
95 ance of the springs 14 until the globe-plate

assumes its required position about the burner, which is the position which the parts occupy when the lantern is lighted.

5 For securing the lever in the depressed position we provide a suitable latch 18, which may consist simply of a spring-wire secured at one end, as indicated at 19, to the tube 11 of the lantern, and which, working within a slot 20 in the appropriate tube 2 after the manner
10 of an umbrella-snap, presents a detaining-face 21 squarely against the loop or free end 16 of the lever.

If the operator desires to raise the globe for any purpose after the lantern has been lighted,
15 all he has to do is to depress the latch 18 and release the lever, whereupon the springs 10 exert themselves to lift the globe and canopy and with them the lever. It may be observed, therefore, that whether the lever be employed
20 for depressing the globe or for releasing it its free end, by which it is manipulated, is located at a distance from the heated portions of the lantern either above and out of contact with them, as shown in Fig. I, or to one side
25 of them and in contact only with an air-cooled tube 2, as shown in Fig. II.

By the term "manipulation" as descriptive of the means for operating the lever 14 and

the latch 18, we refer to the actual handling by an operator of those parts. 30

What we claim is—

In a tubular lantern, the combination with its tubes, burner, spring-actuated globe, and globe-supporting mechanism, of a bell-crank lever pivoted at its ends to one of the tubes, 35 its loop end overlapping the other, and bearing with its angular faces against the canopy, and a spring-wire latch secured at one end to that tube of the cylinder overlapped by the loop of the lever, and working in a slot there- 40 in in the path of the loop end of the lever, whereby, through the coöperation of the lever, the latch, and the globe-supporting mechanism, the globe may be depressed exclusively by manipulation of the lever, and may be ele- 45 vated exclusively by manipulation of the latch, substantially as and for the purpose specified.

In testimony of all which we have hereunto subscribed our names.

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Witnesses:

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