

(No Model.)

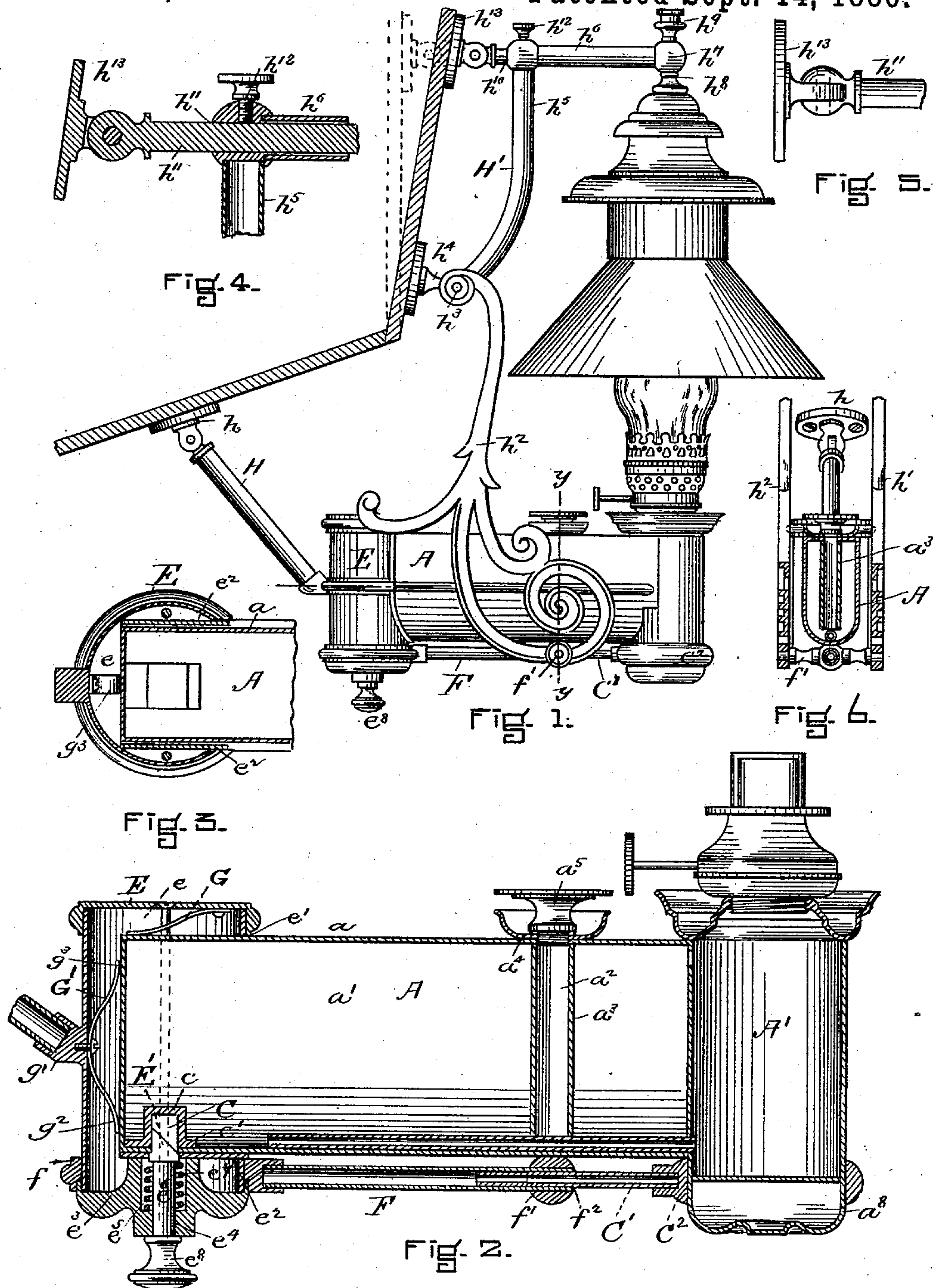
3 Sheets—Sheet 1.

F. A. TABER.

LAMP HOLDER FOR CAR AND OTHER LAMPS.

No. 349,186.

Patented Sept. 14, 1886.



WITNESSES.

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INVENTOR-

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(No Model.)

3 Sheets—Sheet 2.

F. A. TABER.

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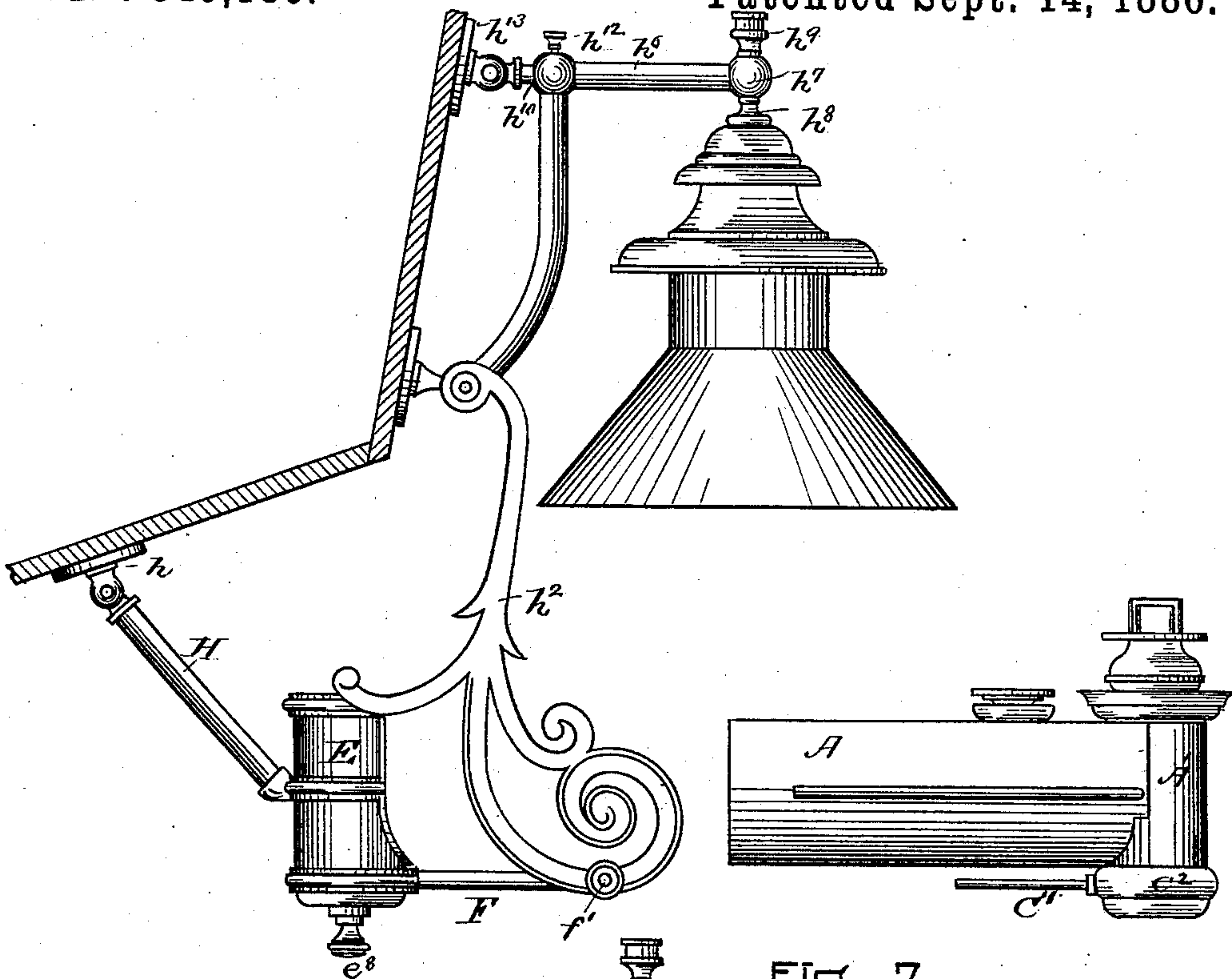


FIG. 7-

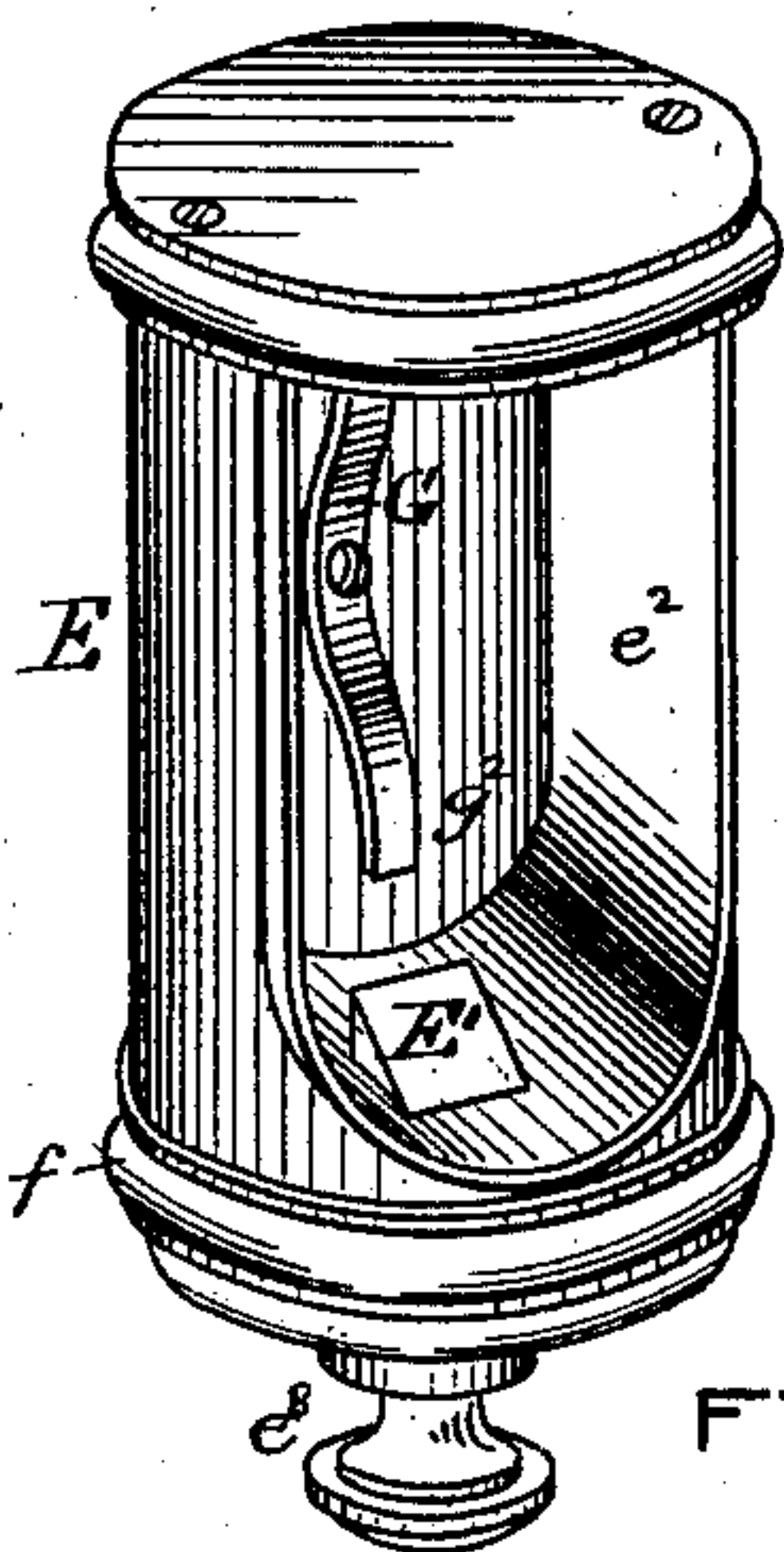


FIG. 9-

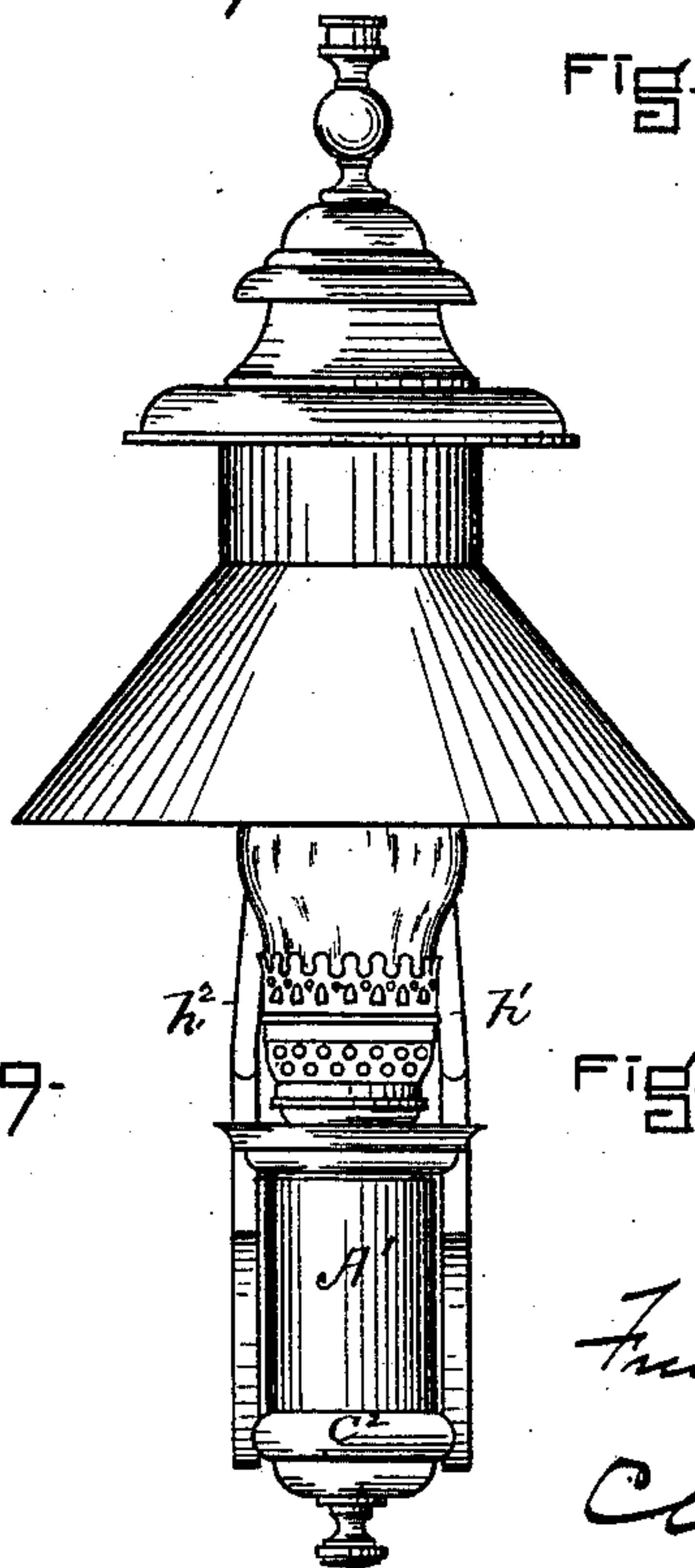


FIG. 8-

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(No Model.)

3 Sheets—Sheet 3.

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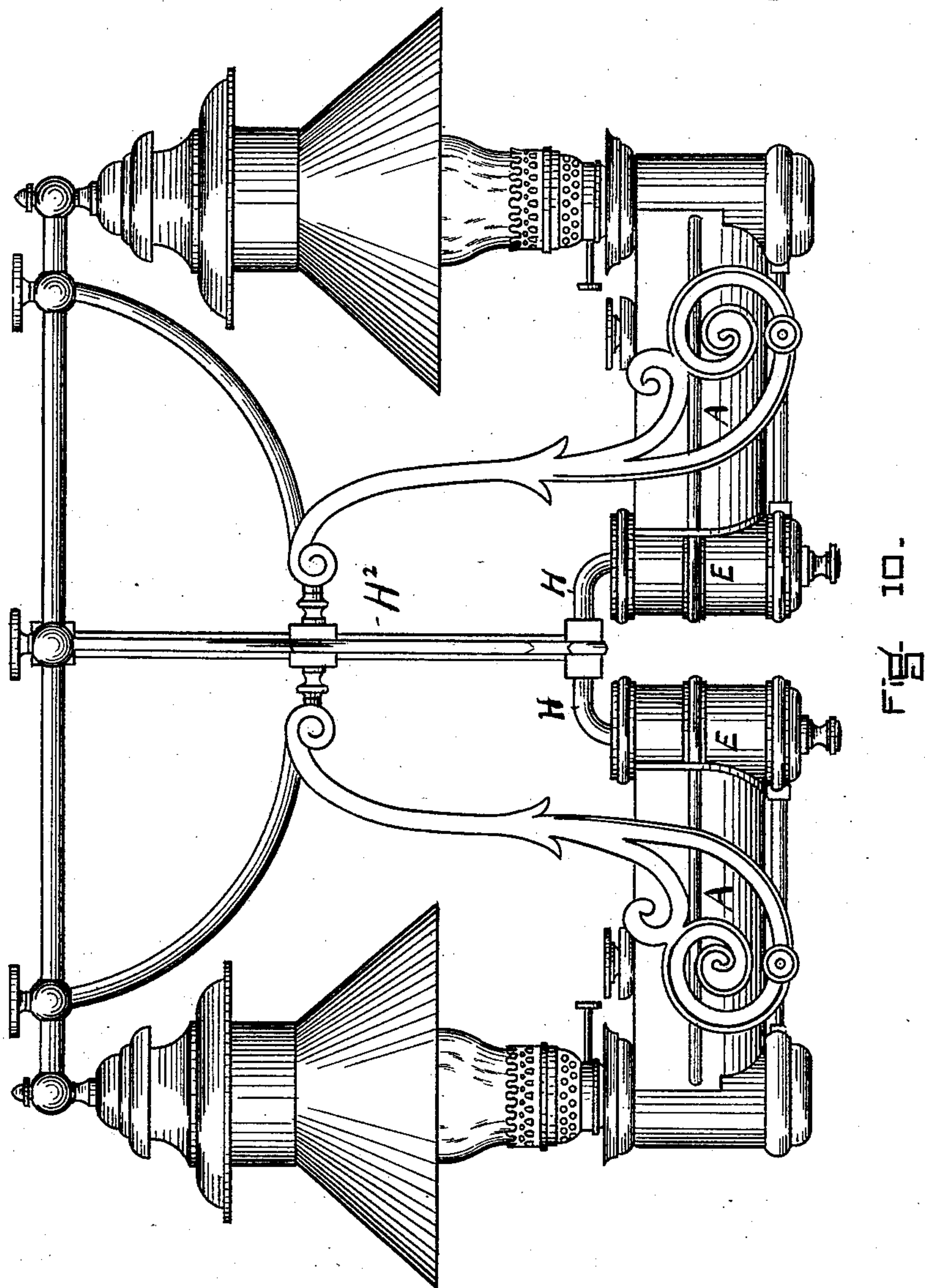


Fig. 10.

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UNITED STATES PATENT OFFICE.

FREEMAN A. TABER, OF NEWTON, ASSIGNOR TO THE STAR BRASS MANUFACTURING COMPANY, OF BOSTON, MASSACHUSETTS.

LAMP-HOLDER FOR CAR AND OTHER LAMPS.

SPECIFICATION forming part of Letters Patent No. 349,186, dated September 14, 1886.

Application filed December 2, 1885. Serial No. 184,426. (No model.)

To all whom it may concern:

Be it known that I, FREEMAN A. TABER, of Newton, in the county of Middlesex and State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Lamp-Holders for Car and other Lamps, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in describing its nature.

The objects of the invention are, first, to provide a suspensory support or bracket for a lamp or lamp-holder, by which it may be suspended or hung from inclined or sloping surfaces, provided with adjustments whereby it is adapted to be secured to surfaces—such as the roofs of monitor-cars, &c.—regardless of the inclination of slope of such surface, and without the addition or change of any of its parts.

The invention further relates to a lamp-holder and to the means for attaching the lamp-body thereto in a manner to permit of its ready removal.

Referring to the drawings, Figure 1 represents in elevation a lamp and its supporting frame or bracket, and in cross-section a portion of a car-roof, the upper part of which is shown as somewhat inclined. The view also shows in dotted lines the relation of the lamp bracket or support to the car-roof when a straight or vertical upper section is used, instead of an inclined one. Fig. 2 is a longitudinal vertical section of the lamp-body and the lamp-body holder. Fig. 3 is a horizontal section upon the line *xx* of Fig. 2. Fig. 4 is a detail view of the support or bracket adjusting mechanism, hereinafter described. Fig. 5 is a plan view of a part thereof. Fig. 6 is a vertical section upon the line *yy* of Fig. 1. Fig. 7 is a view in elevation of the lamp-holder and its bracket or support and of the lamp-body, the lamp-body being represented as removed from the holder. Fig. 8 is a front elevation of the entire device. Fig. 9 is a view in perspective of the lamp-holder, showing the interior of the lamp-body-holding cavity. Fig. 10 is a view in side elevation representing the application of the invention when two lamp-holders or lamps are used.

Referring to the drawings, A represents the

lamp-body. It comprises a longitudinal metal case, *a*, which forms the oil-reservoir *a'*. It has the oil-inlet *a²*, comprising a pipe or tube, *a³*, extending down from the cup *a⁴* to very near the bottom of the reservoir, and the entrance thereto is closed by the screw-plug *a⁵*. This reservoir is connected with the wick-reservoir or chamber *A'* of the lamp by means of the passage *a⁶* in the tube *a⁷*, which extends from near the back end of the oil-reservoir along the bottom thereof to the wick-reservoir *A'*, the wick-reservoir being in all other respects separated from the oil-reservoir.

B represents the burner of the lamp. The body of the lamp is also provided with a bolt or latch hole or cavity, *C*. This is preferably formed in a metal block by casting, and shaped as represented in Fig. 2. It has the flange *c'*, by which it is soldered or attached to the inner surface of the shell of the body, and the shell, of course, has a hole to provide an entrance to the latch-hole. The lower portion, *a⁸*, of the front section of the lamp also has a rod or stem, *C'*, either tubular or not, extending horizontally backward therefrom, and which is attached to the lower section, preferably by a solid metal ring, *c²*, surrounding it.

The lamp-holder comprises the shell *E*, which may be of any desired form, and it has a cavity, *e*, and an entrance, *e'*, thereto, of a size to receive the end of the lamp-body *A*. This cavity is of a depth sufficient to furnish a proper support for the rear end of the lamp-body and hold it extended horizontally or laterally therefrom. Arranged within the cavity is the curved metal plate *e²*, which forms the sides and bottom of the cavity, extends to the entrance *e'*, and provides the cavity with a form corresponding to the shape of the portion of the lamp-body *A* inserted therein. The shell *E* also has the base *e³*, which is provided with a hole, *e⁴*, and a chamber, *e⁵*. This hole and chamber receive the stud or spindle *e⁶* of the latching device, and the stud or spindle supports or carries at its end the latch *E'*, which is forced outward by the coil-spring *e⁷*, contained in the chamber *e⁵*, and arranged to bear against the end of the chamber and the shoulder formed by the latch *E'*. The stud or spindle also has the operating-knob *e⁸*. The plate *e²* has a hole through which the latch *E'*

projects, and the latch is arranged so as to automatically enter the latch-receiving hole or recess C of the lamp-body upon the insertion of the end of the casing into the lamp-holder.

5 There also projects from the base of the lamp-holder E the rod or stem F, which, preferably, is in the form of a tube, and which is firmly fastened to the lamp-holder by the ring *f*. This tube extends horizontally from the lamp-holder, parallel with the body or casing A,
10 to the cross-bar, piece, or support *f'*, into or through which it extends, and its end *f''* is open, to receive the rod or tube C', extending from the base of the front part of the lamp-casing, as before described, when the lamp-body is placed in the holder.

It will be seen from the above description that the lamp-body is supported by the shell or holder E, which receives its end, and to
20 which it is automatically locked by an automatic locking device, and by the rod or spindle C', which enters the hole in the cross-bar or support *f'*.

To steady the lamp-body in the lamp-holder, I use the spring G, arranged to bear upon the upper surface of the body, and attached at its forward end to the top of the shell E, so as to extend inward, as represented in Fig. 2, and the spring G', which is fastened at *g* to the case
30 E, and the ring *g'* about it, and this spring G has two arms, *g'' g'''*, which extend into the cavity *e* of the lamp-holder, so as to come in contact with and bear against the inner end of the lamp-body A when it is placed in position.
35 These springs serve to steady the lamp and prevent the transmission of shocks or vibrations to the lamp body and burner.

I have now described the lamp-holder, or that part of it adapted to receive and hold the
40 lamp-body.

The lamp-support, or means by which the holder and body are secured or suspended in place, comprises the arm or rod H, which is rigidly fastened to the ring *g'* of the casing A
45 of the lamp-holder, and it has at its end the pivoted fastening-plate *h*, having screw-holes, by which it is attached to its supporting or sustaining surface. The support further comprises two pieces or parts, *h' h''*. These parts
50 are connected below the lamp-body by the cross-bar *f'*, upon which the lamp-body is adapted to rest. They are also connected at their upper ends by a cross-bar, *h''*, from which extends the pivoted fastening-plate *h'*, having screw-holes, and which serves to assist in fastening the support to its supporting or sustaining surface. Extending upward from the cross-bar *h''* is the shade-supporting arm *h''*, which is pivoted to or adapted to swing on the
60 cross-bar. This arm has the horizontal extension *h''*, and its end *h''* is enlarged to receive the screw-spindle *h''* of the shade-holder, which passes through the same and is secured in place by the nut *h''*. The section *h''* of the shade-holder is tubular, and has an opening,
65 *h''*, which receives the spindle or rod *h''*, which is movable therein and is fastened thereto by

the set-screw *h''*. This rod or spindle *h''* has at its outer end the pivoted fastening-plate *h''*, having screw-holes, by which it is fastened or
70 secured in any position. By making the rod or spindle *h''* movable in relation to the pivoted shade-supporting arm *h'' h''*, it will be seen that this portion of the support can be secured to a surface of any inclination, and so
75 that the shade shall always have the proper vertical position in relation to the chimney and burner, and in Fig. 1 I have given two views of the position of this rod or spindle, the first representing the support as inclined,
80 and the second as vertical. It will be seen from this description that the lamp support or bracket comprises a holding or stay rod, H, attached to the lamp-holder, the suspensory-bracket *h' h''*, carrying a cross-rod, upon which
85 the lamp-body rests, and the pivoted shade-supporting arm or bracket *h'' h''*, having the adjustable steadying and fastening connection *h''*.

In the operation of removing the lamp-body
90 from its holder, it is simply necessary to draw down the spring-latch E and draw out the lamp-body from the cavity of the holder, and to insert or replace it it is only necessary to place the end of the body at the end of the
95 cavity and to push the same inward until the latch automatically engages with its socket or recess C.

To secure the lamp-holder and lamp in place, it is only necessary to fasten the rod and bracket
100 to the surface of the roof or other support and to adjust the rod *h''* in relation to the shade-support *h'' h''* to bring the shade into proper place. It is not essential that the stay-rod or spindle C' be used, but when it is employed it
105 will be desirable to make the portion which extends into the hole F shorter than that part of the lamp-body which extends into the cavity of the holder, in order that the lamp-body may be partially inserted in the said
110 cavity before the end the stay-rod C' enters the hole *f''*.

I would state that the portion of the invention relating to the lamp-holder may be used in connection with lamp-bodies shorter than
115 that shown in the drawings. Of course I may use either of the arms *h' h''* of the bracket, instead of both, if I should so desire, although two provide a somewhat better construction.

In Fig. 10 I have shown, in side elevation,
120 the adaptation of my invention to the supporting of two lamp-bodies or lamps, and it will be seen that the construction of the lamp-holders and lamp-bodies is the same as that above described, and that the only difference
125 in construction is that the stay-rods H extend from the upper surface of the lamp-holders and are united to each other and to a central post or stud, H', to which the brackets of each lamp-holder are attached, as is also the brackets or arms supporting the shade-holders, and
130 in case more than two lamps are used, the construction will be substantially like that shown in Fig. 10.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The lamp-holder E, having the cavity *e*, entrance *e'*, and the spring-latch E', in combination with the lamp-body A, having the latch-receiving socket or recess C, all substantially as and for the purposes described.

2. The combination of the lamp-holder E, having the cavity *e*, entrance *e'*, a latching device, E', and the spring G, with the lamp-body A, all substantially as and for the purposes described.

3. The combination of the lamp-holder E, having a cavity, *e*, entrance *e'*, the spring G', and the lamp-body A, and a latch, E', all substantially as described.

4. The combination of the holder E, having a cavity, *e*, entrance *e'*, for receiving and holding the end of the lamp-body, said holder being provided with a supporting attachment or bracket, devices for latching or locking the lamp-body to the said holder E, and the cross-bar *f'*, and supports for said cross-bar, as described, for sustaining or holding the forward part of said body, substantially as set forth.

5. The combination of the lamp-holder E, having the cavity *e*, entrance *e'*, for receiving and holding the end of the lamp-body A, the said lamp-body A, a supporting attachment or bracket for said holder E, the support *f'*, a bracket, as described, carrying the same, and the stay-rod C', engaging support *f'*, substantially as set forth.

6. The combination of the lamp holder or casing E, having the cavity *e*, entrance *e'*, for receiving and holding the end of the lamp-body A, the said lamp-body A, a supporting attachment or bracket for said holder E, the cross-bar *f'*, its supporting-bracket, and an arm or rod, F, connecting the cross-bar with the holder E, substantially as described.

7. The combination of a lamp-holder, E,

having a cavity, *e*, entrance *e'*, for receiving and holding the end of the lamp-body, a supporting attachment or bracket for said holder E, and also having the perforated support *f'*, its supporting-bracket, with the lamp-body A, having the stay-rod C', arranged to enter the perforation or hole in the support *f'*, substantially as described.

8. The combination of the casing *a* of the lamp-body, having a hole formed therein for the reception of the latching device, the metal piece *c*, having the socket C and flange *e'*, by which it is fastened to the inner surface of the casing *a*, with the lamp-holder provided with a spring-latching device, the latch of which is adapted to enter said socket in fastening the lamp-body to the lamp-holder, substantially as described.

9. The lamp support or bracket, comprising a holder, E, the stay-rod H, the fastening-plate *h*, the brackets *h'* *h''*, the fastening-plate *h''*, the cross-bar *f'*, supported by the brackets *h'* *h''*, the shade-support *h''* *h'''*, the adjustable rod *h'''*, and plate *h'''*, all substantially as described.

10. In a lamp support or bracket, the combination of the lamp-holder, supporting arms or brackets, with a pivoted shade-supporting arm or bracket, *h''* *h'''*, the adjustable rod *h'''*, pivoted to the fastening-plate *h'''*, and devices for locking the arm or bracket to the adjustable rod, substantially as and for the purposes described.

11. The combination of a lamp-holder with a supporting-bracket, H, brackets *h'* *h''*, cross-bar *f'*, a rigid connection between the lamp-holder and cross-bar, and a lamp-body supported by said holder and cross-bar, substantially as described.

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Witnesses:

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JNO. I. WILLIAMSON.