

(No Model.)

2 Sheets—Sheet 1.

G. G. SCHROEDER.  
LANTERN.

No. 583,294.

Patented May 25, 1897.

Fig. 1.

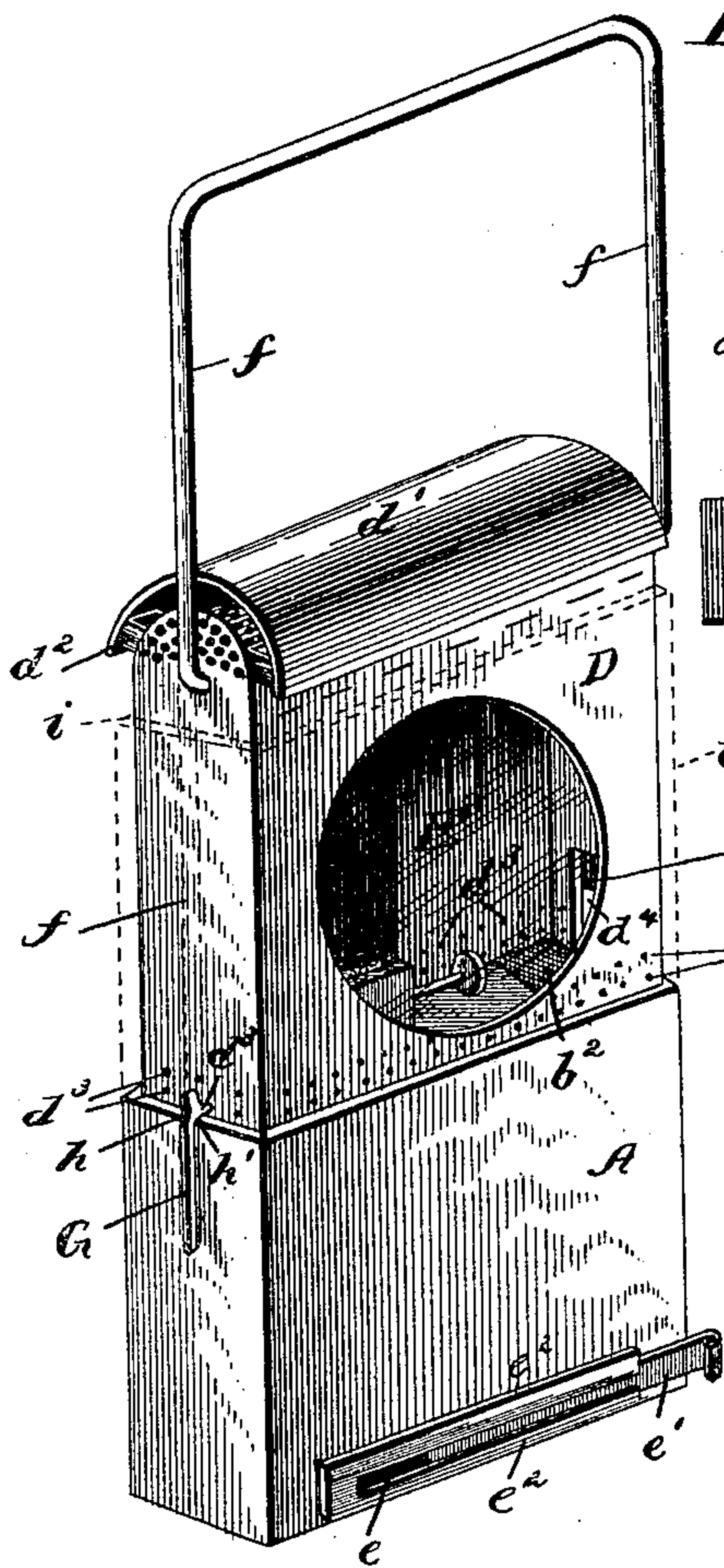


Fig. 11.

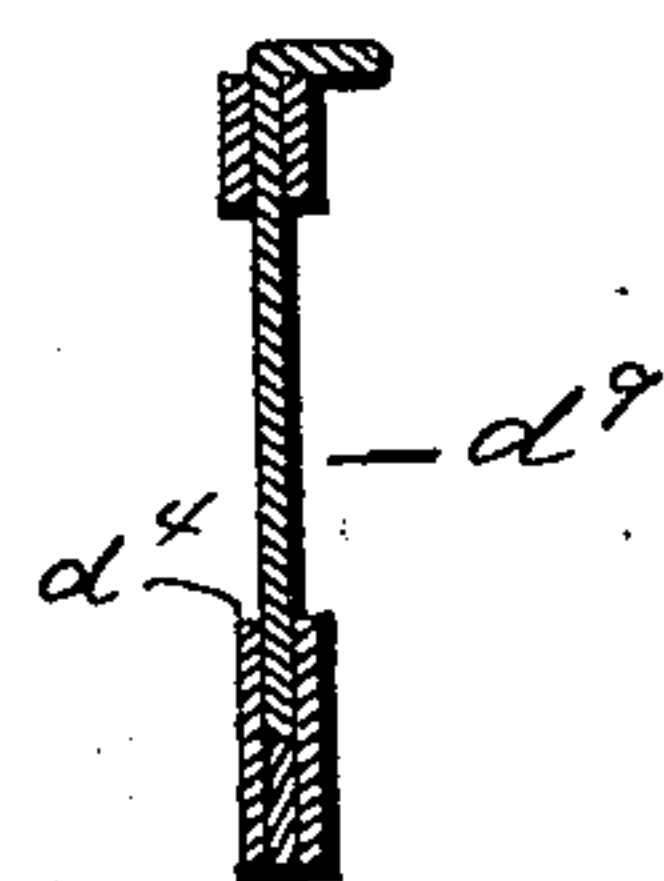


Fig. 4.

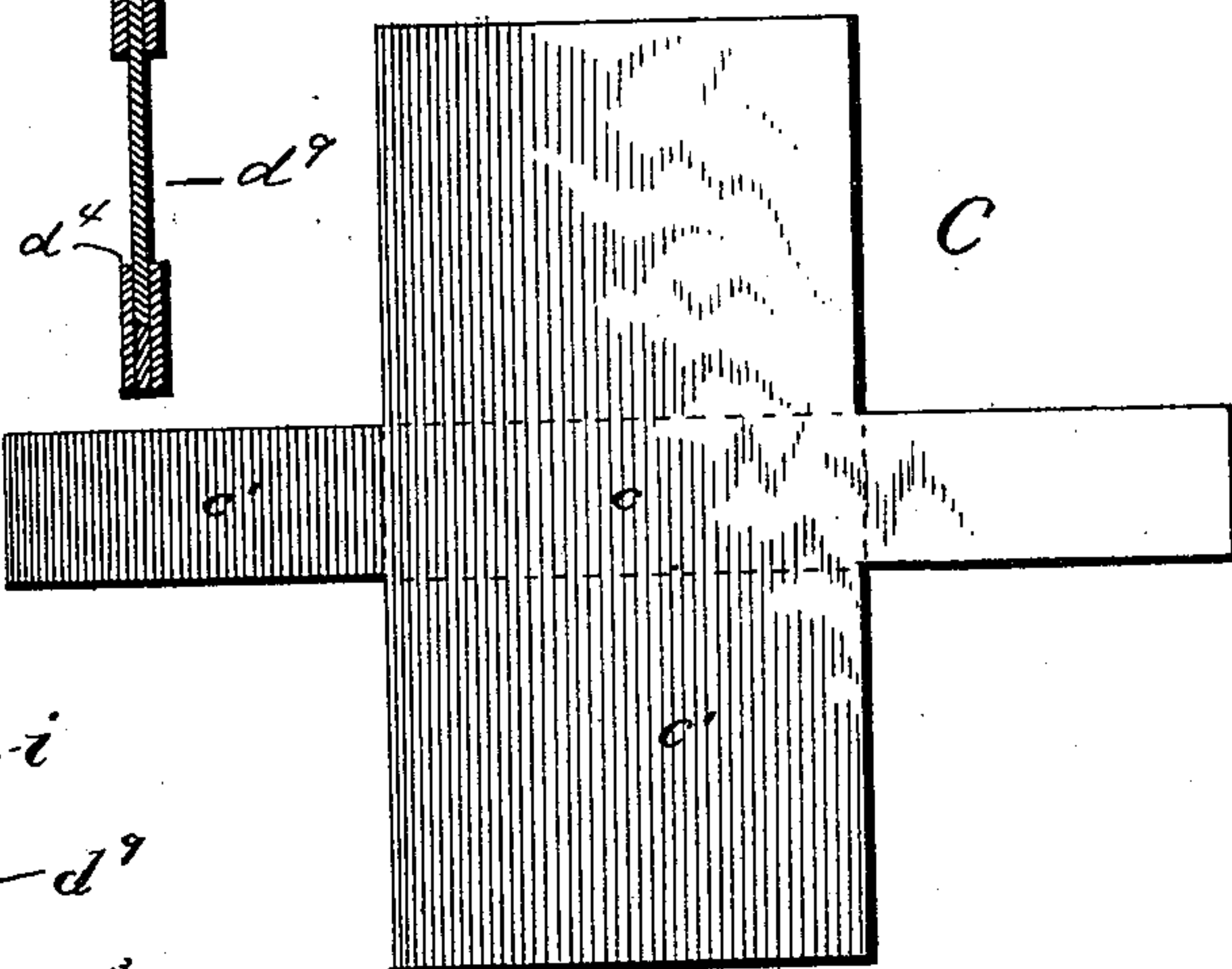


Fig. 9.

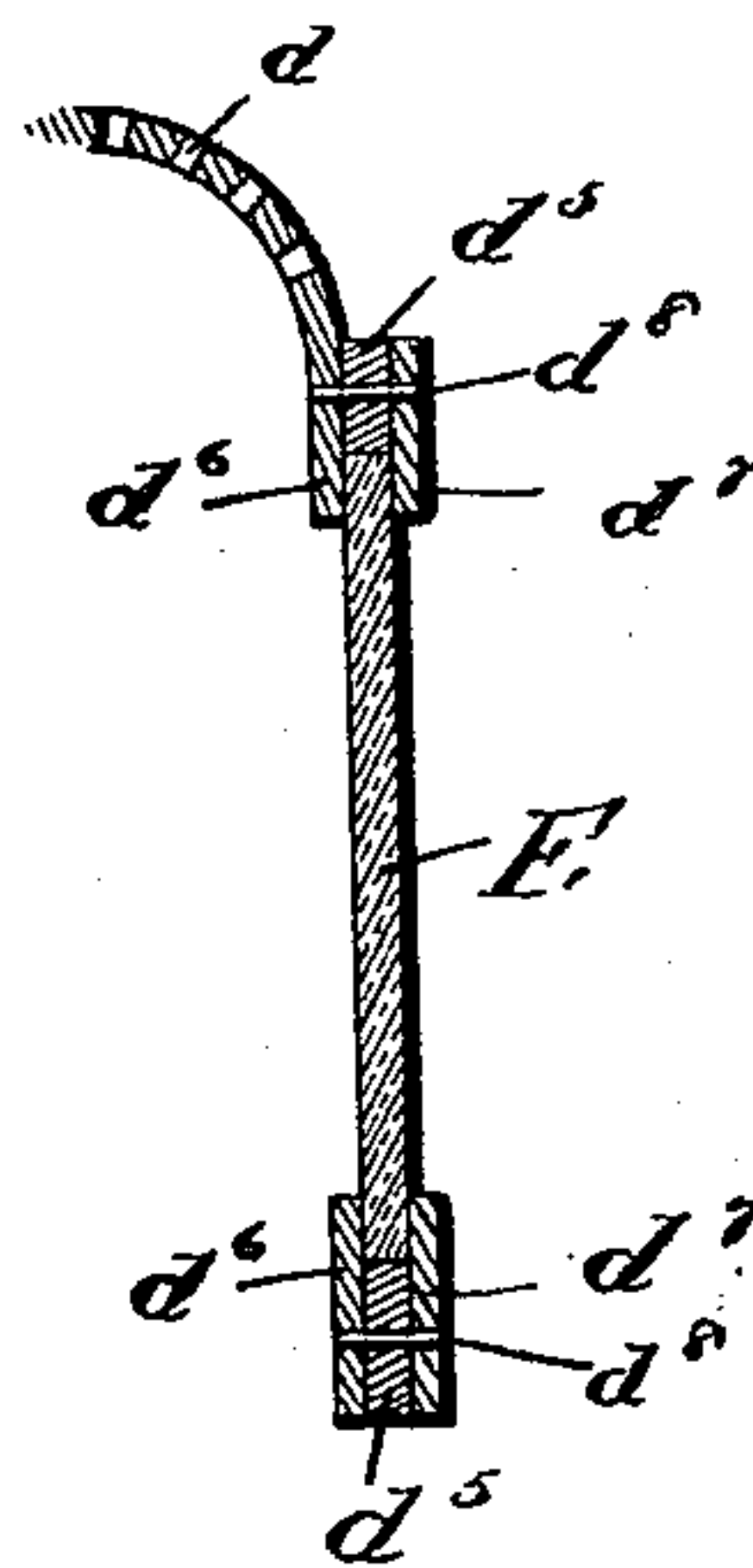


Fig. 10.

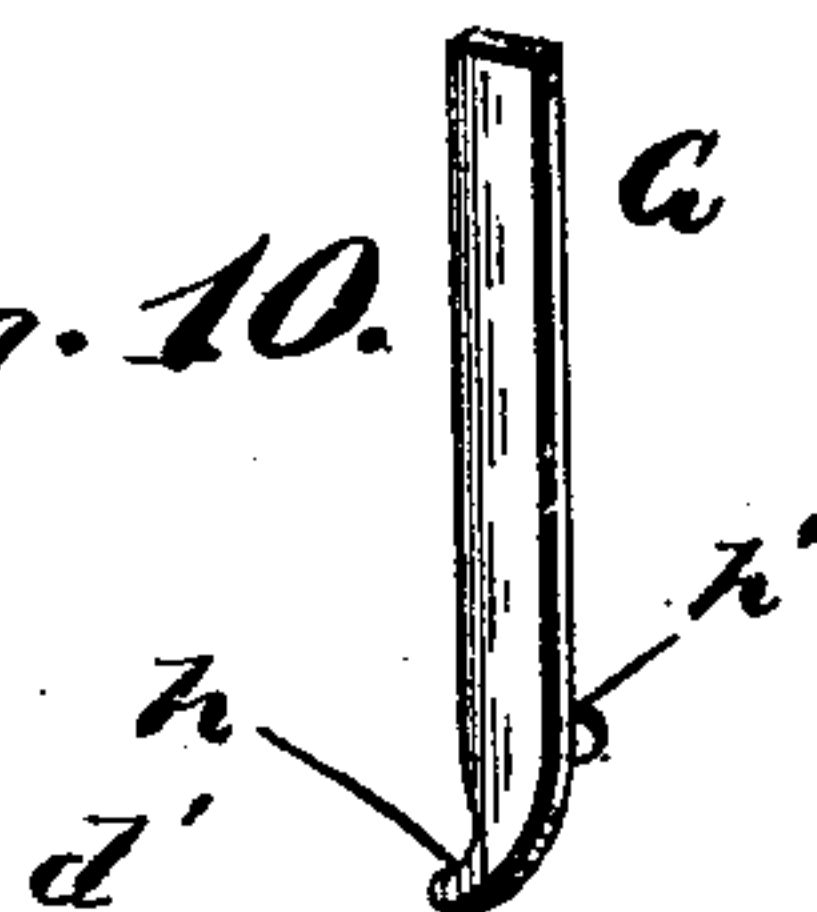
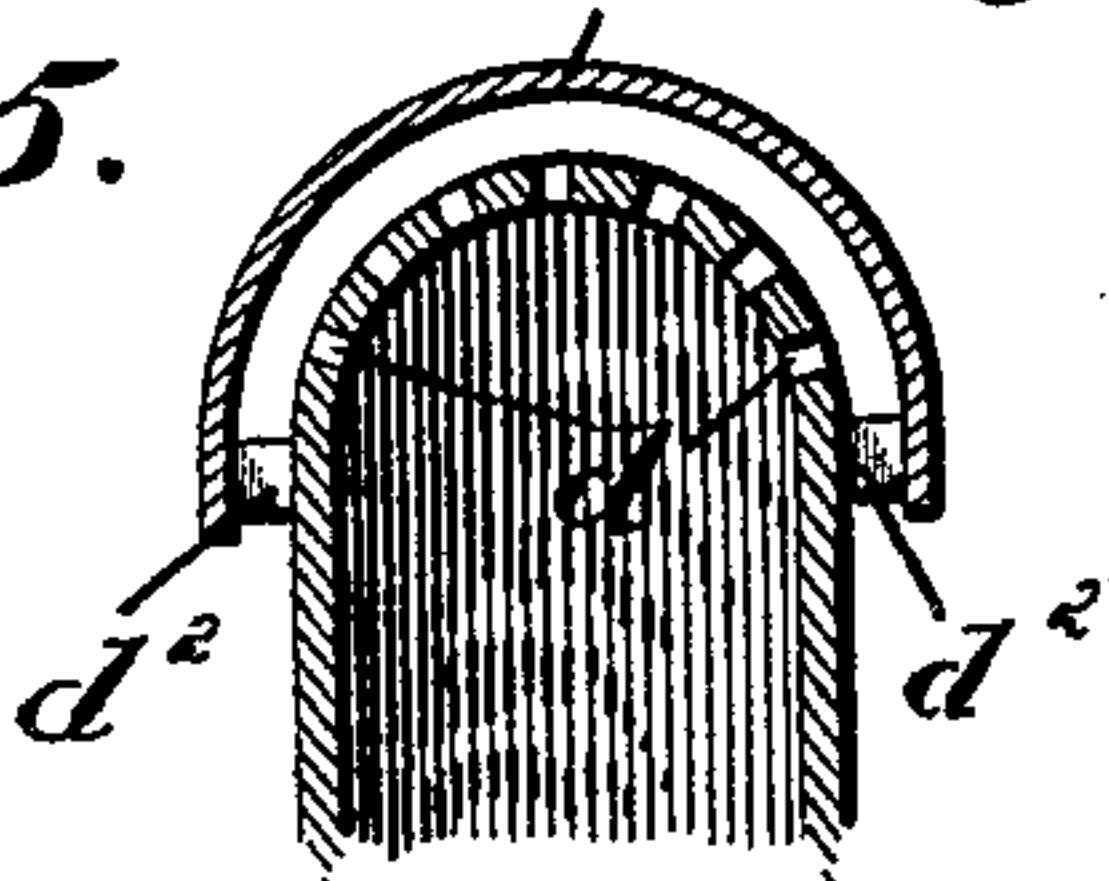


Fig. 5.



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Fig. 2.

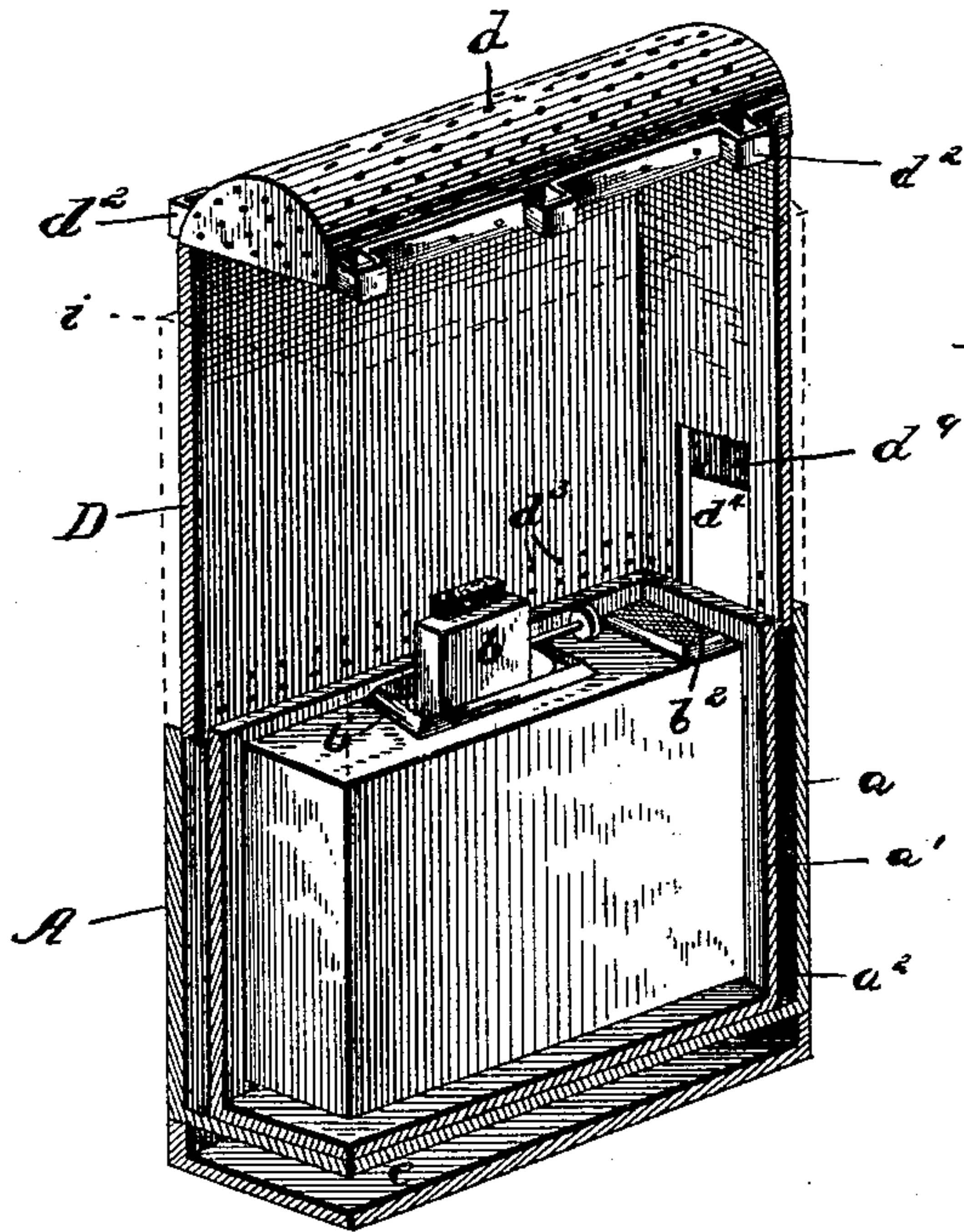


Fig. 8.

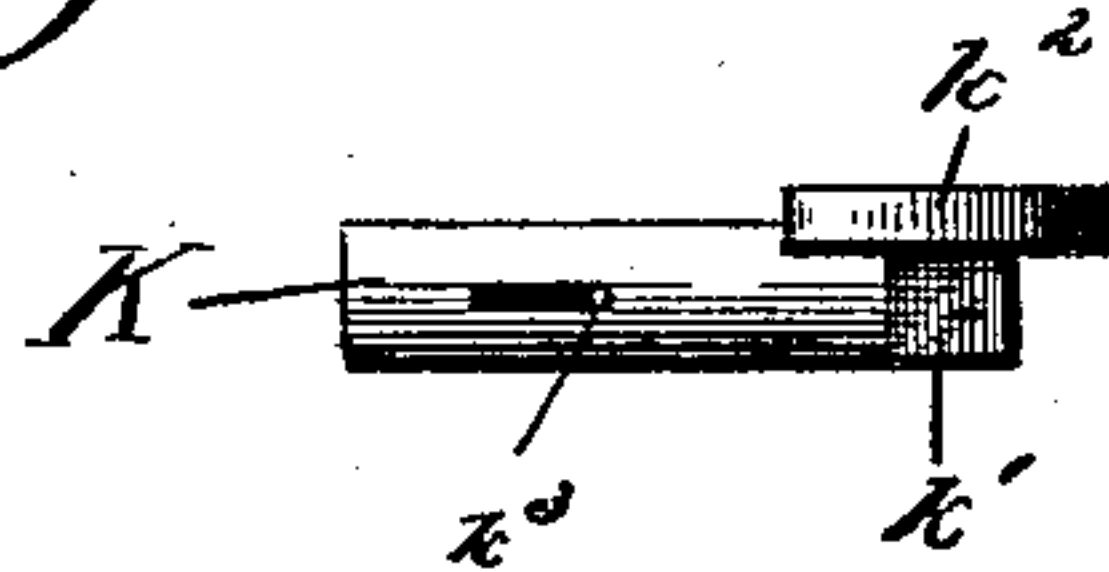


Fig. 6.

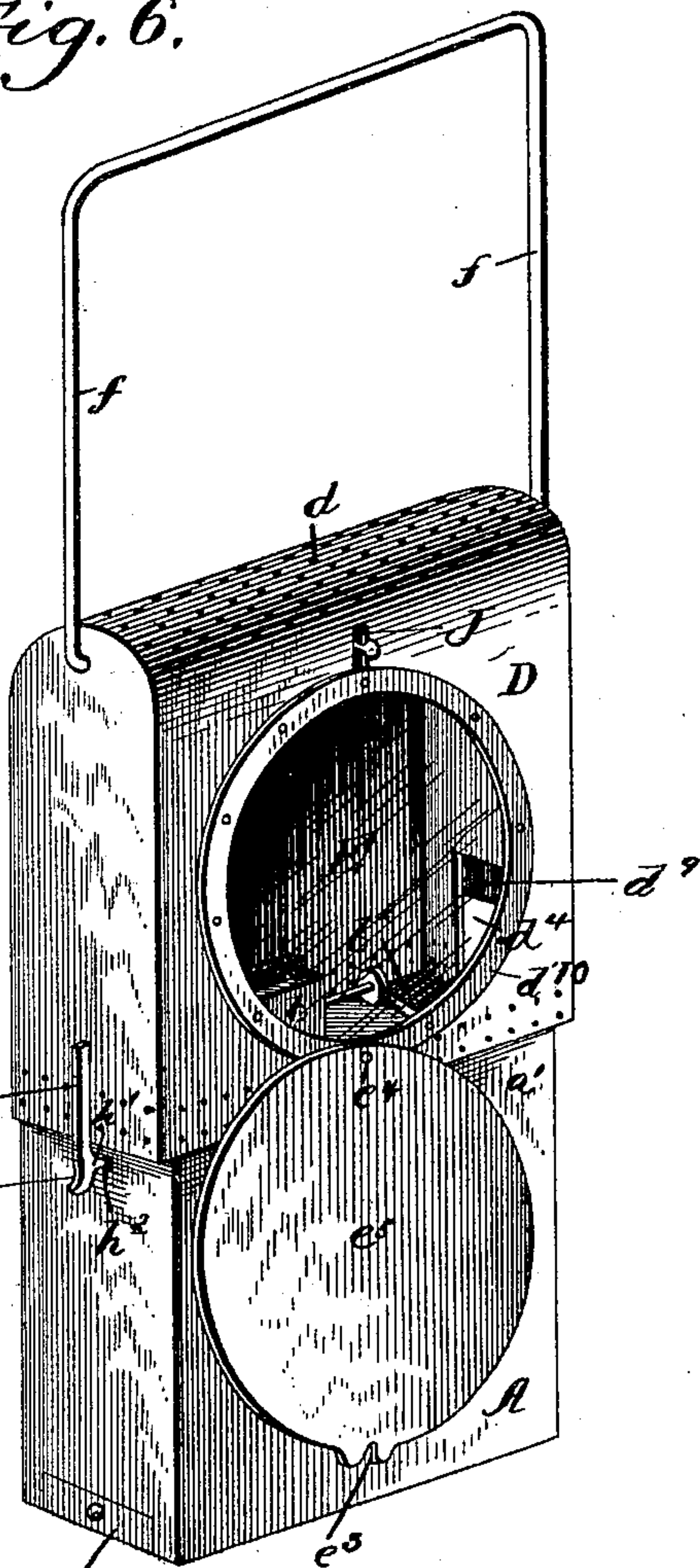


Fig. 3.

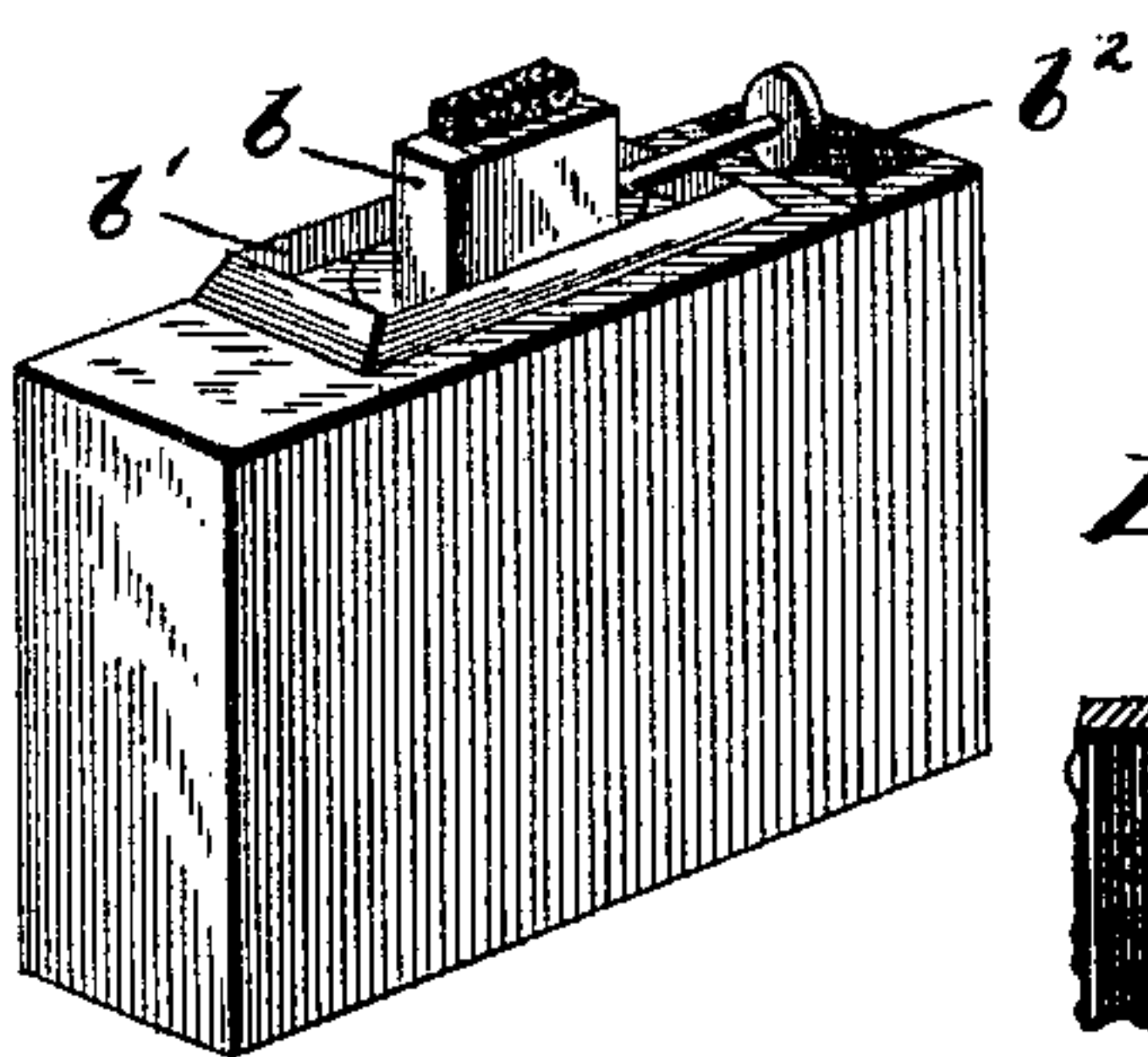


Fig. 3.

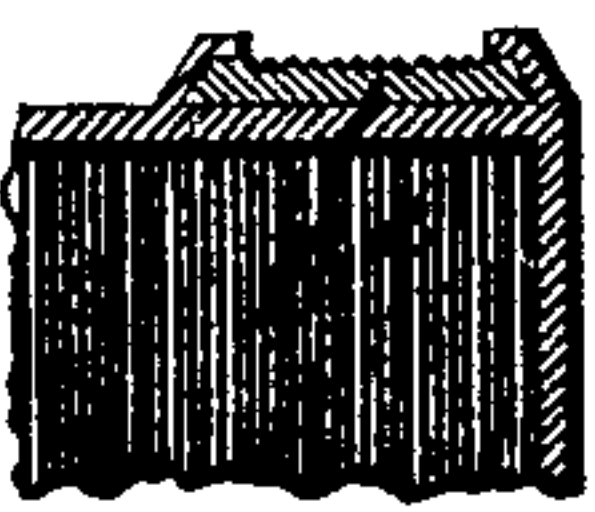
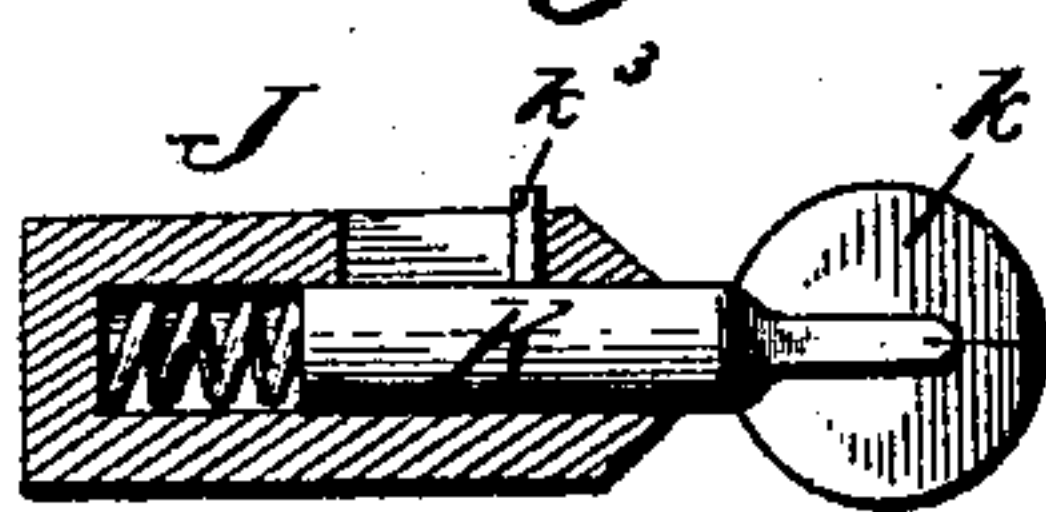


Fig. 7.



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# UNITED STATES PATENT OFFICE.

GEORGE G. SCHROEDER, OF WASHINGTON, DISTRICT OF COLUMBIA.

## LANTERN.

SPECIFICATION forming part of Letters Patent No. 583,294, dated May 25, 1897.

Application filed November 18, 1896. Serial No. 612,615. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE G. SCHROEDER, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Lanterns; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in lanterns.

The objects are, first, to provide a lantern that can be conveniently carried in the pocket; secondly, to provide a pocket-lantern that will provide against the leakage of oil and the consequent soiling of the clothing of the person carrying the same; thirdly, to provide a lantern that will not be extinguished by the wind; fourthly, to provide a lantern that can be lighted in a gust of wind without the match being extinguished before it is applied to the wick; fifthly, to provide a lantern that can be lighted in a barn safely without danger of the head of the match flying off and igniting any combustible substance. These and other objects are obtained by the construction and combination of parts, as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a perspective view of my improved lantern, the dotted lines indicating the positions the upper and lower sections assume when the parts are telescoped. Fig. 2 is a perspective view showing the front wall and end wall, as well as the cap, removed. Fig. 3 is a detail view in perspective of the lamp. Fig. 3<sup>a</sup> is a detail sectional view of removable match-igniter. Fig. 4 is a plan view of the cotton-flannel packing. Fig. 5 is a vertical sectional view taken through the cap and upper part of the upper casing of the lantern illustrated in Figs. 1 and 2. Fig. 6 is a perspective view of a slightly-modified form of the lantern. Fig. 7 is a sectional view of the spring-lock for the covering-plate illustrated in Fig. 6. Fig. 8 is an elevation of said spring-lock. Fig. 9 is a vertical section through the front wall

of the upper casing illustrated in Fig. 6 with the cap and supports removed. Fig. 10 is a detail view of the spring-catch, and Fig. 11 a sectional view of sliding door.

Like letters of reference refer to like parts throughout the several views.

Referring to the drawings, the letter A indicates the lower or base casing, consisting of an inner shell *a'* and an outer shell *a*, forming an intervening space *a*<sup>2</sup>. Near the lower portion of the front of the base-casing A is arranged the match-receptacle *e*; provided with retaining-flanges *e*<sup>2</sup> *e*<sup>2</sup>, beneath which the slide *e'*, for closing the receptacle, works. Upon the bottom piece of the inner shell rests the lamp, the burner *b* of which being of an improved construction. The lamp is provided upon its upper surface with a rectangular upwardly and inwardly inclined flange *b'*, which is designed to catch any oil that might be spilled from the lamp. The top of said lamp is further provided with a match-striking surface *b*<sup>2</sup>, formed by cross-cutting the metal, or preferably raising two undercut flanges from the lamp and sliding between and under said flanges a thin block of wood having a roughened surface, as shown in Fig. 3<sup>a</sup>, so that when the striker is worn or greasy it can be removed and replaced by a new one.

The lamp is covered by a cruciform cotton-cloth packing C, (illustrated in Fig. 4,) which serves the function of absorbing any oil that may leak from the lamp. This covering consists of a bottom piece *c* and side and end flaps *c'*.

The upper casing is indicated by the letter D, said casing provided upon its top with a series of apertures *d* for the exit of smoke and at its lower end with a series of apertures *d*<sup>3</sup> for feeding air to the flame. At the upper end of said casing and projecting from its opposite faces are lugs *d*<sup>2</sup>, which may either be formed integral with the casing or else consist of tin strips kinked rectangularly, as shown in the drawings, and secured to the casing in any desirable manner. These lugs are destined to support the semicylindrical top or cover *d'*, so as to leave a suitable space, as clearly indicated in the drawings, above the perforations *d*, thereby allowing for the escape of heated air and at the same time



preventing the entrance of rain through the perforations and protecting the hand, while carrying the lantern, from the effects of heat.

Fig. 9 is a vertical section of the front of the upper casing with the cylindrical cap and supporting-lugs removed, illustrating the three-ply formation of the tin of said front. These plies are cut out so as to form a central circular opening in which the glass E fits. The outer and inner sheets of tin may be thinner than the glass, and when cut away smaller than same. It will be seen that they form flanges  $d^7$   $d^7$  and  $d^6$   $d^6$ , respectively, covering the edges of the glass to secure it in position. The letter  $d^5$  indicates the middle sheet of tin or metal, which must be as thick as the glass E. Said middle sheet of tin  $d^5$  and the outer sheet, which forms the flanges  $d^7$ , are secured to the inner ply  $d^6$  by a small wire  $d^8$  being inserted through perforations. In case of the breakage of the glass by the employment of this wire the same can be removed and the broken glass replaced by a new one.

One end or side of the upper casing is provided with a rectangular opening  $d^4$  for the accommodation of the sliding door  $d^9$ . This door is also composed of three plies of tin, by means of which the door is supported in like manner as the glass E. The middle sheet, however, is of course cut away above the door sufficiently to allow the door to be raised the required height. Inasmuch, however, as there is no danger of the door breaking like the glass the three sheets of metal may be securely fastened together.

The object of the sliding door and its particular location is to provide for the entrance of the hand, in order to operate the wick, and also to permit of the lighting of a match by contact with the roughened surface  $b^2$ , hereinbefore referred to. This arrangement makes it possible to light the lamp during a gale of wind, and it also makes it safe to light the lamp in a barn, as there is no chance for the head of the match flying off when first lighted, as it otherwise might.

The letter  $f$  indicates a bail having its ends secured to the upper casing.

When it is desired to carry the lantern in the pocket, the upper and lower casings are telescoped—that is, the upper one is slid down in the space  $a^2$  of the base, as indicated by dotted lines, Figs. 1 and 2. When this is done, the bail, which is of sufficient size for the purpose, is passed under the base-casing. It will then be seen that the bail not only serves as a handle for carrying the lantern, but also acts as a means for securing the two sections together when telescoped, as above described, for pocket use.

The letter G indicates a spring-hook (clearly shown in the detail view, Fig. 10) which serves the function of holding the two casings in proper position for use or when parts are drawn out. This hook is provided with a

beveled point  $h'$ , which is designed to enter one of the air-apertures  $d^3$  of the upper casing. When the point is thus in engagement, the sections are held firmly in their adjusted positions. By pulling upon the head  $h$  the point will be thrown out of engagement and the parts thus telescoped, or this may be done by simply pressing the casings together, which will cause the beveled point  $h'$  to ride out of its perforations, and thus disengage the two parts. In practice I prefer to duplicate these hooks or catches upon the opposite ends of the base-casing, as a more effectual fastening is thereby secured.

Fig. 6 of the drawings illustrates a modification of my invention. In the construction previously described the parts were telescoped, so that the upper casing occupied the inner position—that is, passed into the space  $a^2$ , so that the glass would be effectually prevented from breakage when the lamp was not in use or while being carried in the pocket. In the modification referred to I dispense with the inner shell  $a'$  and allow the upper casing to pass down upon the outside of the lower one. I also dispense with the three ply of metal upon the front of the upper casing and in lieu thereof merely use two ply, and in place of the outer sheet employ an annulus or ring  $d^{10}$ , corresponding to the outer flange  $d^7$ , as shown in Fig. 9. It is obvious, however, that when this form is employed there is danger of the glass E being broken when the lamp is not in use or when telescoped for the pocket. To guard against this, therefore, I have provided a circular covering plate or protector  $e^5$ , which is pivoted to the annulus or ring at  $e^4$ , said protector having in its periphery a notch  $e^3$ . Just above the annulus or ring is secured a socketed lug J, and within the socket works a spring-actuated dog or catch K, said dog or catch provided with an operating-pin  $k^3$ , working through an elongated slot in the lug and having its lower end reduced, as shown at  $k'$ , said ends being covered or hid from view by means of a circular plate  $k^2$ . When it is desired to cover the glass, all that is necessary to be done is simply to swing the covering-plate  $e^5$  around on its pivot until its periphery comes in contact with the dog or catch. When this occurs, said dog or catch will be forced upward in the socket against the pressure of the spring and will be held in its raised position until the notch is reached, when said spring will immediately force the dog upward into engagement with the notch. When it is desired to uncover the glass, the dog is raised by means of an operating-pin  $k^2$  and the covering-plate permitted to fall. In this modification, also, the spring G is secured to the upper casing with the point extending downward, so as to engage an aperture in the base. This is made necessary in view of the difference in the arrangement of the telescoping sections.



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

1. In a lantern, the combination with a base-  
5 casing consisting of inner and outer shells forming an intervening rectangular space, of an upper casing adapted to slide within said space, substantially as set forth.
2. In a lantern, the combination with upper  
10 and lower telescoping casings, of a bail secured to said upper casing, adapted to act as a handle when the parts are extended, and to pass beneath the lower casing when the parts are telescoped, so as to secure the same  
15 together, substantially as set forth.
3. In a lantern, the combination of a casing having its top provided with a series of smoke-  
exit apertures, and also provided with a series of extending lugs, of a semicylindrical  
20 cap or cover adapted to rest upon said lugs so as to leave a space between the top of the casing and the under side of the cap or cover, substantially as set forth.
4. In a lantern, the combination of a casing,

the front part of said casing composed of 25  
three plies of tin, the inner and outer plies being of less thickness than the central ply, and extending beyond the edges, all of said plies being circularly apertured of a wire, passing through registering holes at the up- 30  
per end of the plies, and a glass cover fitting between the inner and the outer plies of tin, and having its periphery adjacent thereto, substantially as set forth.

5. In a lantern, the combination of a casing, 35  
a lamp inserted therein, and a cruciform packing for said lamp, consisting of a bottom piece and side and end flaps, the edges of said flaps adapted to meet when folded up against the lamp-body, substantially as set 40  
forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE G. SCHROEDER.

Witnesses:

E. E. RAMEY,  
W. I. TUNE.