

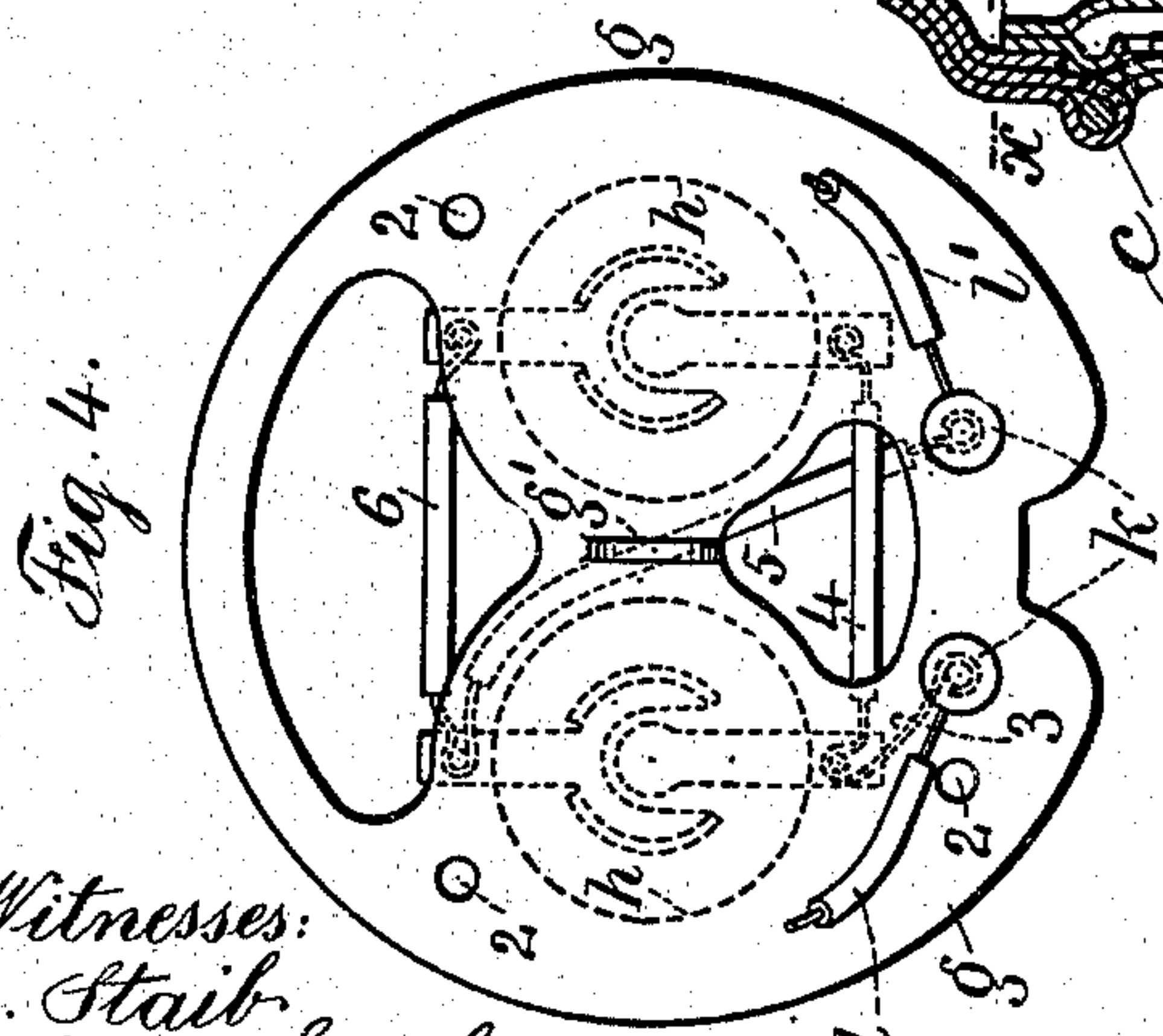
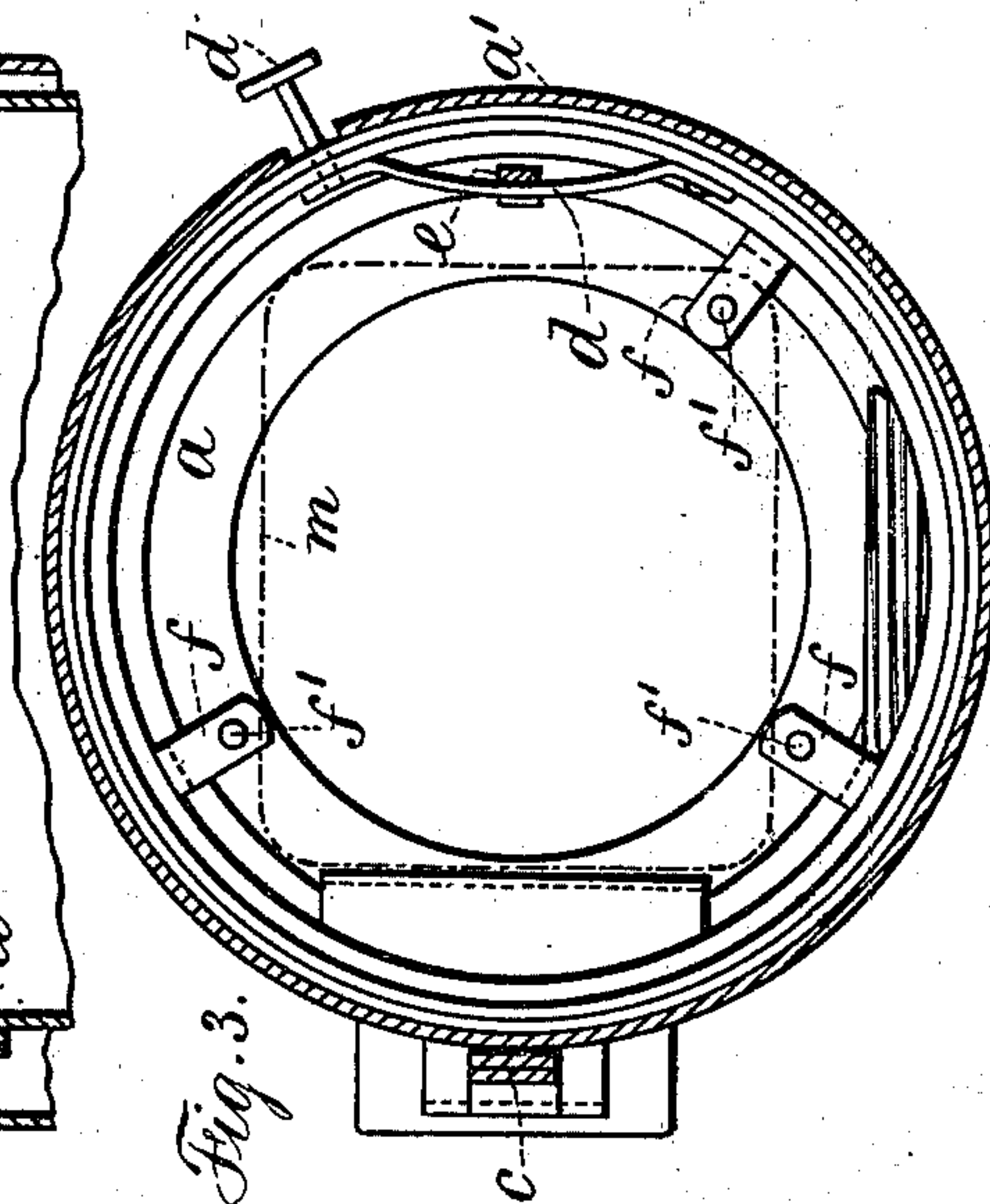
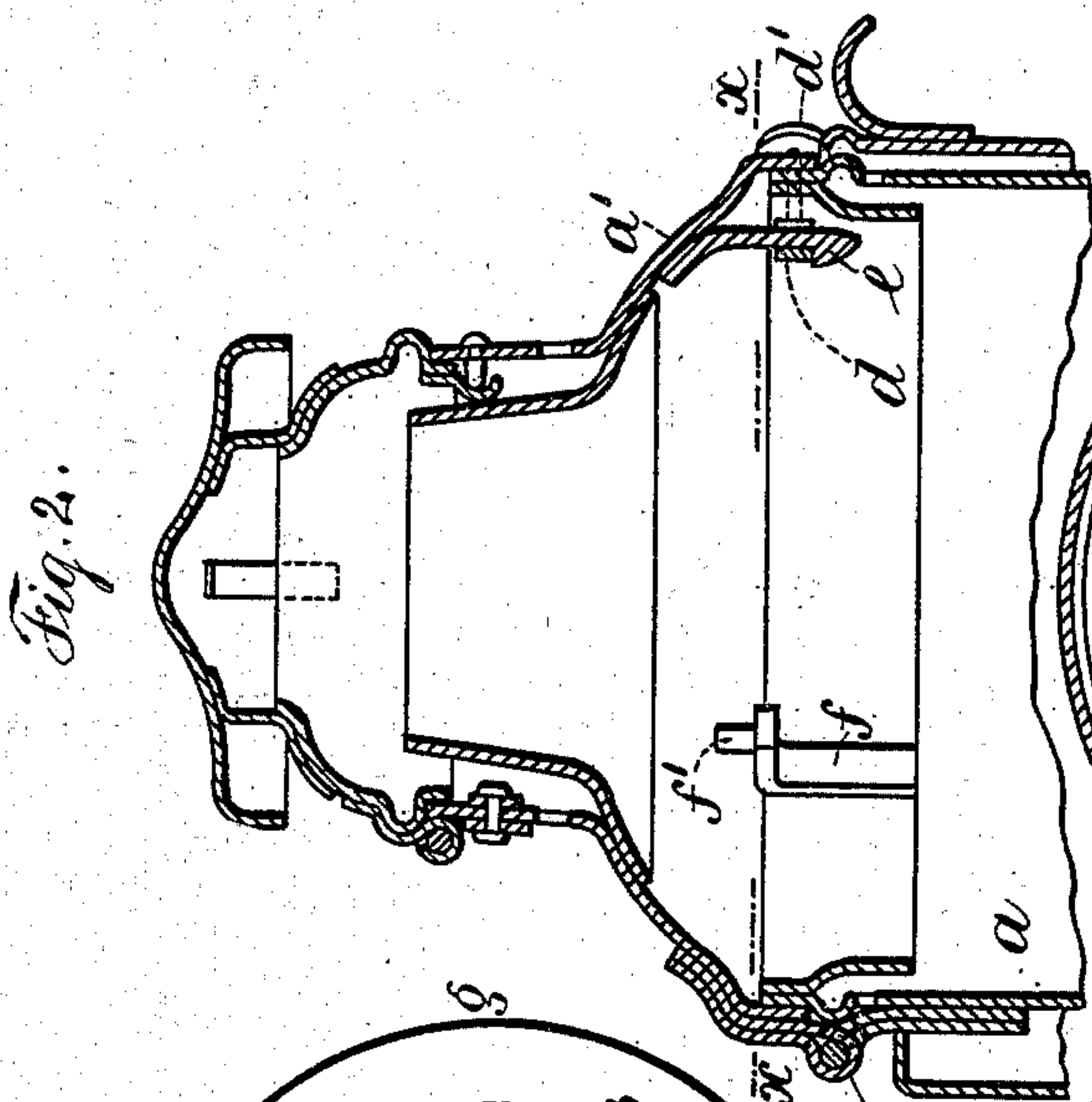
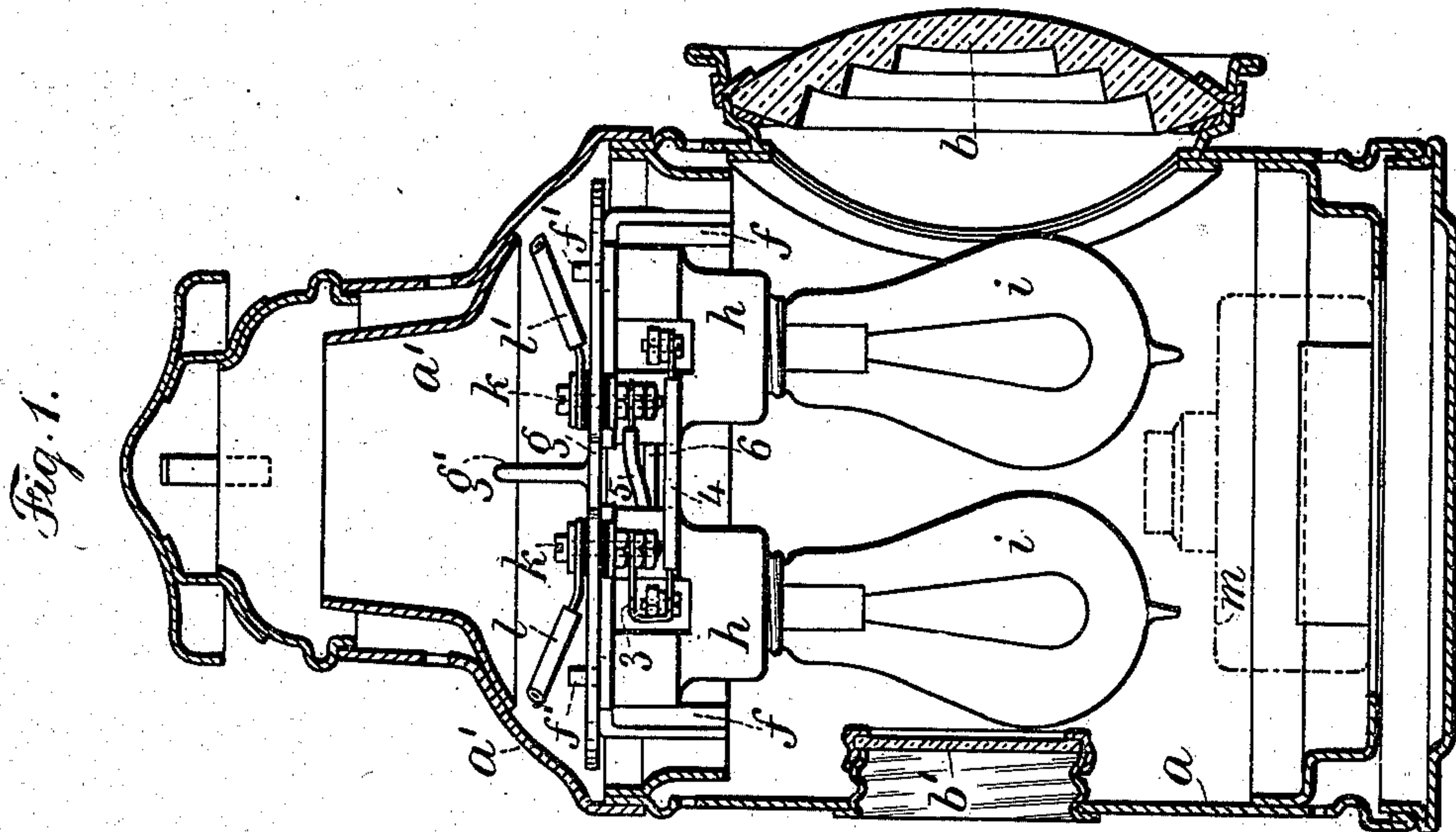
No. 723,146.

PATENTED MAR. 17, 1903.

F. W. DRESSEL.  
SIGNAL LANTERN.

APPLICATION FILED DEC. 28, 1902.

NO MODEL.



Witnesses:  
J. Staib  
Chas & Smith

Inventor :  
Frederick W. Dressel  
per L. W. Sullivan & Son attys



# UNITED STATES PATENT OFFICE.

FREDERICK W. DRESSEL, OF NEW YORK, N. Y., ASSIGNOR TO THE DRESSEL RAILWAY LAMP WORKS, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## SIGNAL-LANTERN.

SPECIFICATION forming part of Letters Patent No. 723,146, dated March 17, 1903.

Application filed December 26, 1902. Serial No. 136,522. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK W. DRESSEL, a citizen of the United States, residing in the borough of Manhattan, city, county, and State of New York, have invented an Improvement in Signal-Lanterns, of which the following is a specification.

My invention relates to such railway signal-lanterns as are employed at switches semaphores, and upon the tops of cars or cabooses; and the object of my invention is to be able to employ at pleasure as a light-giving medium either electric lamps or an oil font and burner.

In carrying out my invention I hinge the top of the lantern to the body and provide a spring plate and catch for engaging and holding the top in place. The lantern-body is of usual construction, and I provide in the upper end thereof bracket-arms spaced apart and having studs rising from their upper surfaces. A plate of metal having perforations agreeing in area and position with the studs of said brackets fits within the lower portion of the lantern-top over said studs and is supported by the bracket-arms. This plate carries two electric-lamp sockets, binding-posts, and electric connections between such parts and to the line, and the incandescent electric lamps hang within the body of the lantern from the sockets secured to the plate and in line with the lens and the observation-glass. When the cover which assists in keeping the parts in position is unlatched and raised, the plate and both sockets and lamps can be simultaneously removed from the lamp-body. An oil font and burner may be employed in lieu of the incandescent electric lamps and upon their removal the oil-font may be inserted from above and the brackets that remain secured to the lamp-body are an evidence of the interchangeable use of the structure.

In the drawings, Figure 1 is a vertical section and partial elevation representing my improvement. Fig. 2 is a vertical section through the lantern-top at right angles to the position Fig. 1 and showing the hinged latch plate and stud for holding the top to the body. Fig. 3 is a sectional plan at *xx* of

Fig. 2, and Fig. 4 is a plan of the plate carrying the incandescent electric lamps and their sockets.

*a* represents the lantern-body, *b* the lens, and *b'*, directly opposite the lens, the observation-glass. These parts are of usual construction.

The lantern-top *a'* is connected to the body *a* by a hinge *c* at one side, and to the opposite side of the body is connected a spring-plate *d*, having a finger-button *d'* passing outside of the lamp-body for engagement in moving the said spring-plate, and *e* is a catch connected to the lantern-top and depending within the same in such a position as to engage the spring-plate *d* in connecting the hinged top down in position to the body of the lantern.

Within the lantern-body *a* at the upper end are bracket-arms *f*. These are secured at desired places or intervals, and each bracket-arm is provided with a stud *f'*, rising from the upper surface, and I prefer in this construction that the upper surface of these bracket-arms should be approximately in line with the upper edge of the lantern-body and that the studs projecting above this surface should extend slightly up into the top of the lantern.

I provide a metal plate *g*, in part perforated as desired for lightness, and advantageously form this plate with a lift-lug *g'*, rising from the central portion. This plate is provided with perforations 2, which agree in position with the studs *f'* of the bracket-arms *f*, the perforations being of slightly-larger area than the studs, so as to readily fit over the studs, the plate resting upon the bracket-arms. To this plate are connected electric-lamp sockets *h*, which carry the electric lamps *i*, and upon the plate are binding-posts *k*, to which the line-wires *l* are connected. These line-wires are shown as broken off within the lantern-top. I do not confine myself in any respect to the manner of entering the line-wires. They may be brought in at the top or in at the bottom of the lantern and carried up inside to their end connections with said binding-posts. The electric conductors 3, 4, 5, and 6 extend from one binding-post to one



socket, from this to the other socket, again between the sockets, and from one socket back to the other post, so as to complete the circuit through the two lamps. Transversely of the lantern-body the two electric lamps are preferably placed in line between the lens *b* and the observation-glass *b'* for the twofold reason, first, that the combined light may shine directly through the lens, the light thus being intensified over and above what it would be if the two lights were in a plane at right angles to a plane between the lens and observation-glass, and, second, because by looking through the observation-glass it can readily be seen if both electric lamps are in order or if one or both are burned out. This metal plate *g*, carrying both sockets and the electric lamps, is readily and quickly placed in the lantern or removed therefrom. There are no parts to be coupled or uncoupled save the line-wires, and when the plate is removed the same, with both lamps and all the connections, come away intact.

Instead of employing electric lamps in this lantern an oil font and burner *m* (shown in Fig. 1 by dotted lines) may be employed, as the structure is adapted for interchangeable use, and when the oil-font is used and the electric-light apparatus removed the brackets for supporting the latter as fixtures in the lantern-body still remain.

I claim as my invention—

1. In a convertible signal-lantern, the combination with the lantern-body and the top hinged thereto, of brackets secured to the lantern-body adjacent to the upper end, studs

formed with and rising from said bracket-arms, a plate having perforations agreeing in location with and adapted to receive said studs for the support of the plate and the connection thereof to the brackets, lamp-sockets connected to the under side of said plate for supporting one or more incandescent lamps, binding-posts for the line-wires and connections between the same and the lamp-sockets, substantially as set forth.

2. In a convertible signal-lantern, the combination with the lantern-body having a lens in one side and an observation-glass in the opposite side, of a lantern top or cover connected at one side to the body by a hinge, and a spring plate and catch for removably engaging the plate at the other side, a series of brackets secured to the inner surface of the lamp-body at the upper end at predetermined points and having studs rising from their upper surfaces, a metal plate having perforations agreeing in position with and adapted to receive said studs by which the plate is supported upon the brackets and connected to the lantern, sockets for incandescent lamps secured to the under surface of said plate in line between the lens and the observation-glass, binding-posts upon said plate for the line-wires and electric connections between the same and the respective sockets, substantially as and for the purposes set forth.

Signed by me this 23d day of December, 1902.

FREDERICK W. DRESSEL.

Witnesses:

GEO. T. PINCKNEY,  
S. T. HAVILAND.