

No. 813,202.

PATENTED FEB. 20, 1906.

F. W. DRESSEL.  
LAMP BURNER.

APPLICATION FILED SEPT. 20, 1905.

Fig. 1.

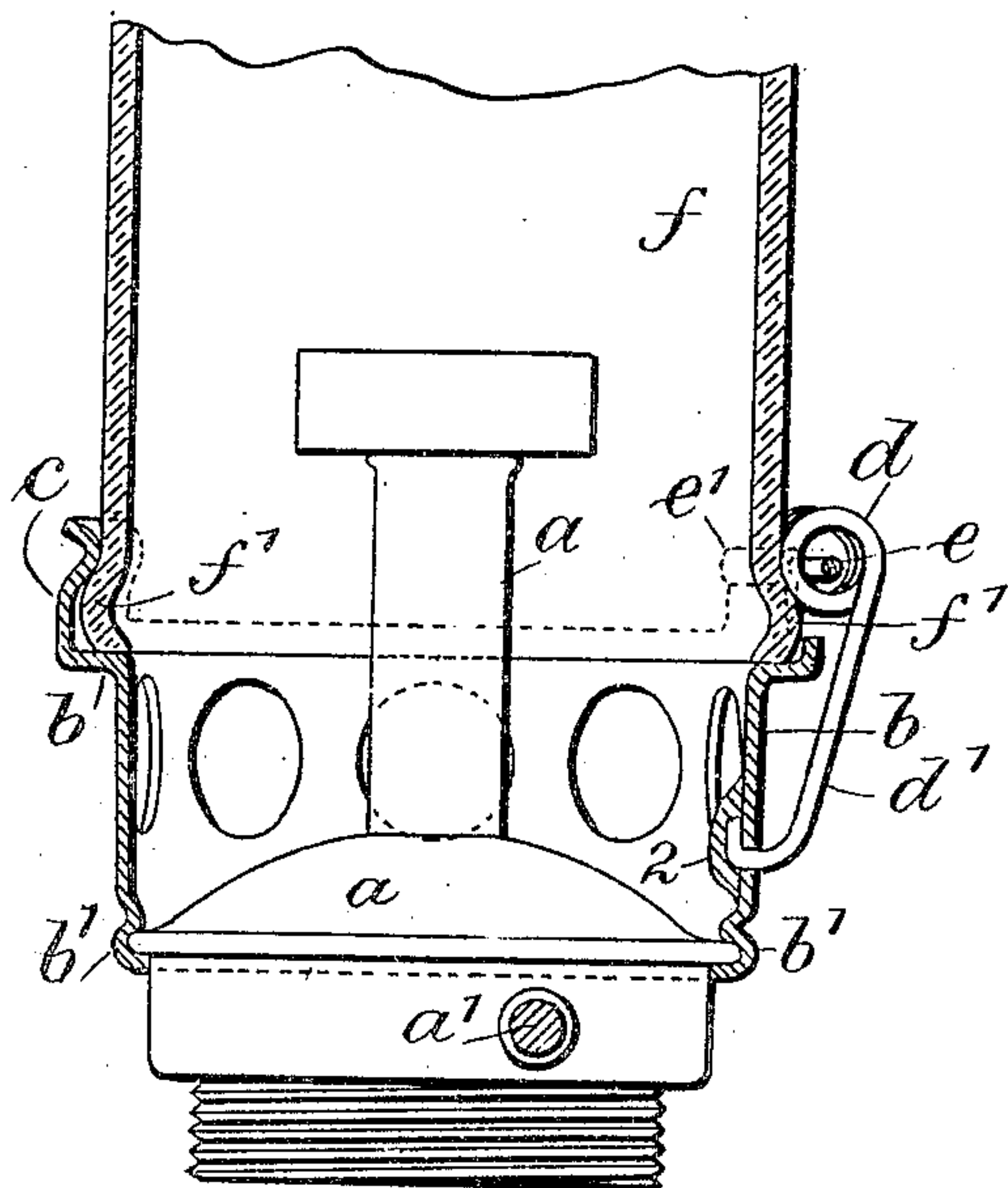


Fig. 2.

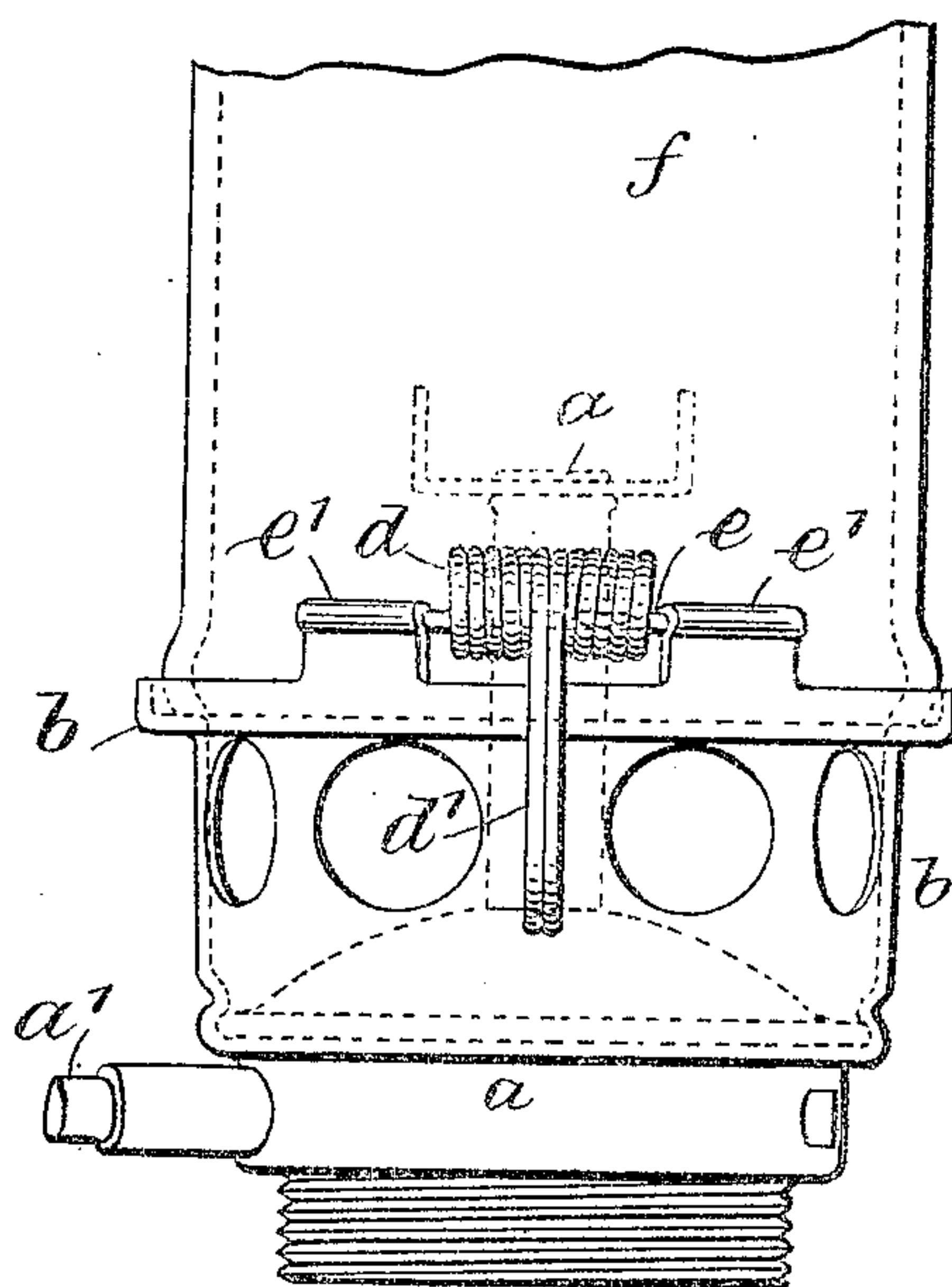
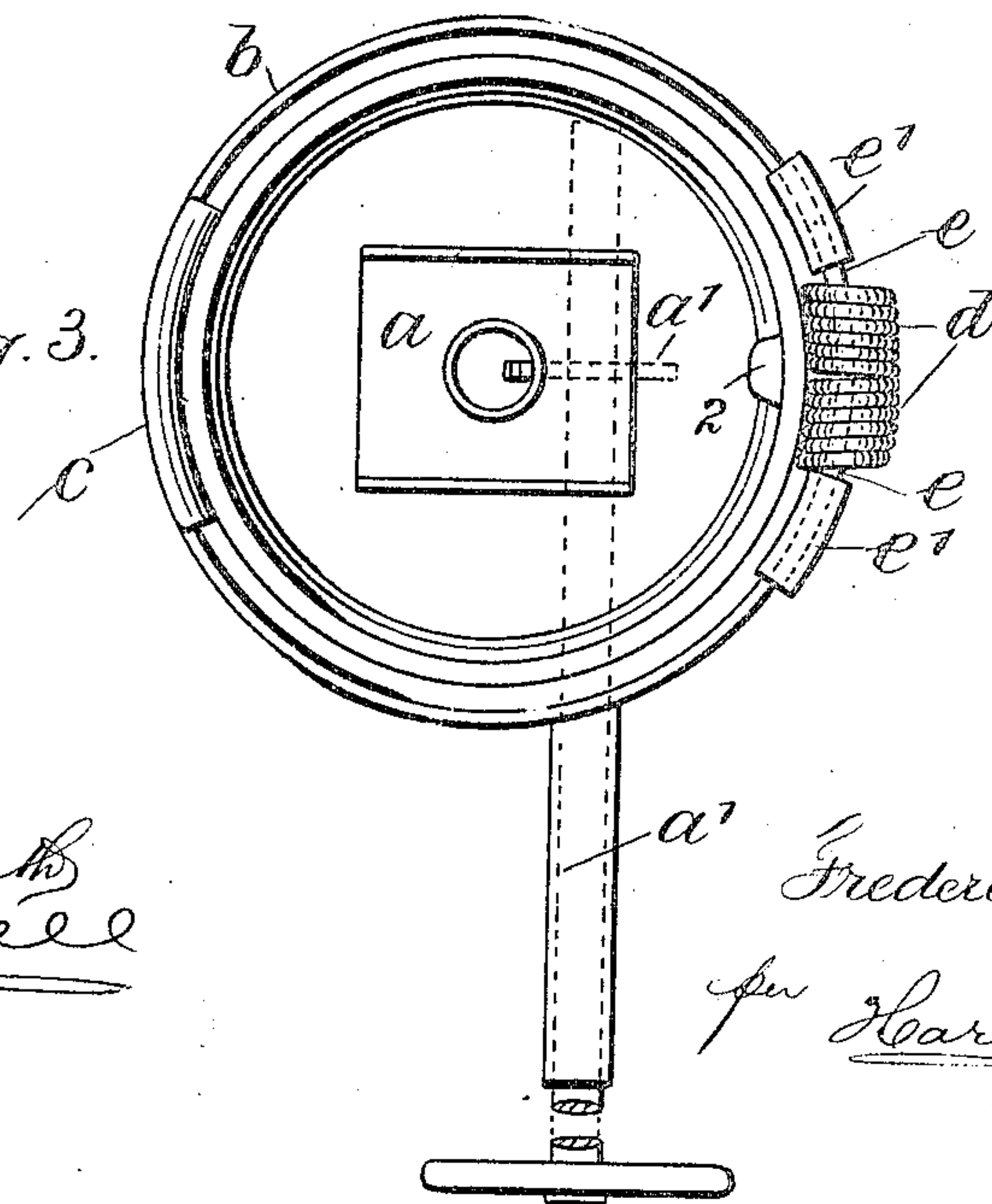


Fig. 3.



Witnesses

Chas. Smith  
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Inventor

Frederick W. Dressel  
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att'y



# UNITED STATES PATENT OFFICE.

FREDERICK W. DRESSEL, OF NEW YORK, N. Y., ASSIGNOR TO THE  
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## LAMP-BURNER.

No. 813,202.

Specification of Letters Patent.

Patented Feb. 20, 1906.

Application filed September 20, 1905. Serial No. 279,246.

*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 Lamp-Burners, of which the following is a specification.

My invention relates particularly to small burners and their chimneys of the class used, essentially, in signal and hand lanterns. Heretofore these chimneys have usually been held with considerable force to the burners in an effort to overcome the loosening tendency of vibration in use, and this has made it difficult to remove the chimney for cleaning and has also increased the liability to breakage; and the object of my invention is to overcome such difficulties.

In the device of my improvement one end of the chimney is ribbed and the burner at one side is provided with a grooved arm or part of the gallery and at the other side with a spring-helix of limited yield, there being in connection therewith a support for the end of the chimney. This spring-helix yields as the chimney is connected to or removed from the burner, and the pressure with which the chimney is held is constant and sufficient to overcome any tendency to displacement as the result of vibration.

In the drawings, Figure 1 is a partial elevation and section through both the holding-points of the chimney. Fig. 2 is an elevation at the helix side, and Fig. 3 is a plan in the relation of the parts shown in Fig. 1.

The burner *a* and its wick-raiser *a'* are small and of usual character in these particular devices—that is to say, the small burners and chimneys of the class used essentially in signal and hand lanterns especially for railroad use.

*b* represents the chimney support or gallery, secured at its lower end *b'* to a flange of the burner. At one side of the gallery there is an arm *c*, bent to form an inside recess, and at the opposite side a double helix *d*, the arms *d'* thereof lying close together and extending downward, passing through the chimney-gallery to a solder-joint 2 on the inner side, which secures the same in place to the gallery of the burner. A wire *e* of curved form of the same arc as the gallery passes through the helix, and at opposite sides of the helix

the gallery is made with support-arms *e'*, to which the respective ends of the wire *e* are secured, said arms also forming supports for the lower end of the chimney *f*, which chimney is provided at its lower end with a rib *f'*, extending entirely around the chimney or for appreciable distances at opposite sides.

Fig. 1 shows the chimney in place with the rib at one side received by the recessed arm *c*, a part of which contacts with the surface of the chimney above the rib, the rib passing into the recess on the under side. The rib passes below the helix, so that the helix bears against the surface of the chimney and upper part of the rib, these parts holding the chimney down and the helix exerting a pressure transversely of the chimney to prevent vibration in any respect unseating the chimney.

While I have shown a double helix or, in other words, two helices, each formed integral with one of the arms *d'*, I do not limit myself to this precise construction, as a continuous helix of any desired character would perform the same function.

In inserting the chimney one side is to be first placed in the recessed arm *c* and the other side forced past the helix, and the reverse movement effects the removal of the chimney. The wire *e* limits the movement of the helix, so that it is not possible to apply as much pressure as would tend to injure the arm-support thereof or break the helix away from its solder-joint, and the said helix is adapted to yield under the expansive action of heat in the chimney or the contracting action of cold, so that the chimney is always held in position.

I claim as my invention—

1. The combination with a lamp-chimney ribbed at one end, of a lamp-burner and its gallery, a recessed support-arm at one side of said gallery, a wire helix at the opposite side adapted to engage the rib of said chimney and hold the same with a continuous pressure and points of support for the lower end of the chimney at opposite ends on the helix.
2. The combination with a lamp-chimney ribbed at one end, of a lamp-burner and its gallery, a recessed support-arm at one side of said gallery, a wire helix at the opposite side adapted to engage the rib of said chimney and hold the same with a continuous pressure, points of support for the lower end of

the chimney at the opposite ends of the helix and a wire of curved form passing through the helix to limit its movement with the respective ends of the wire secured to said opposite places of support.

3. The combination in a lamp-burner with a gallery having an arm curved in plan conforming to the curve of the gallery, curved in vertical cross-section and located at one side of the gallery, of a double helix at the opposite side of the gallery, arms from the ends of the double helix lying side by side and passing down the gallery and at their free ends soldered thereto, a curved wire passing through the double helix, support-

arms rising from the gallery at opposite sides or ends of the helix and to which the respective ends of the said wire are secured, and a lamp-chimney ribbed at its lower end and adapted to be received in the recessed arm at one side and by the helix at the other side with the lower end of the chimney resting upon the support-arms.

Signed by me this 15th day of September, 1905.

FREDERICK W. DRESSEL.

Witnesses:

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