

No. 750,455.

PATENTED JAN. 26, 1904.

W. S. HAMM.
LAMP BURNER.

• APPLICATION FILED AUG. 3, 1903.

NO MODEL.

Fig. 1

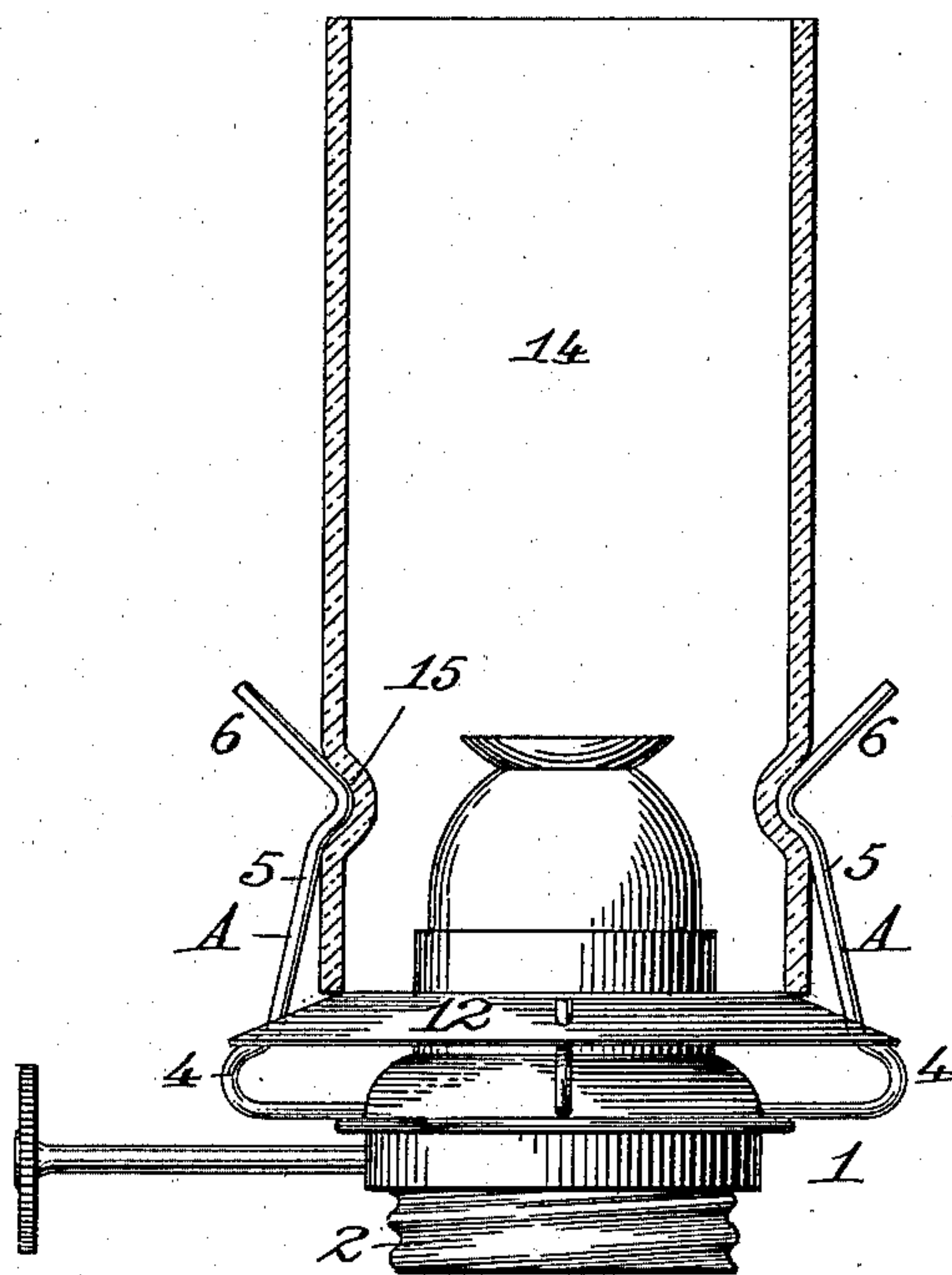
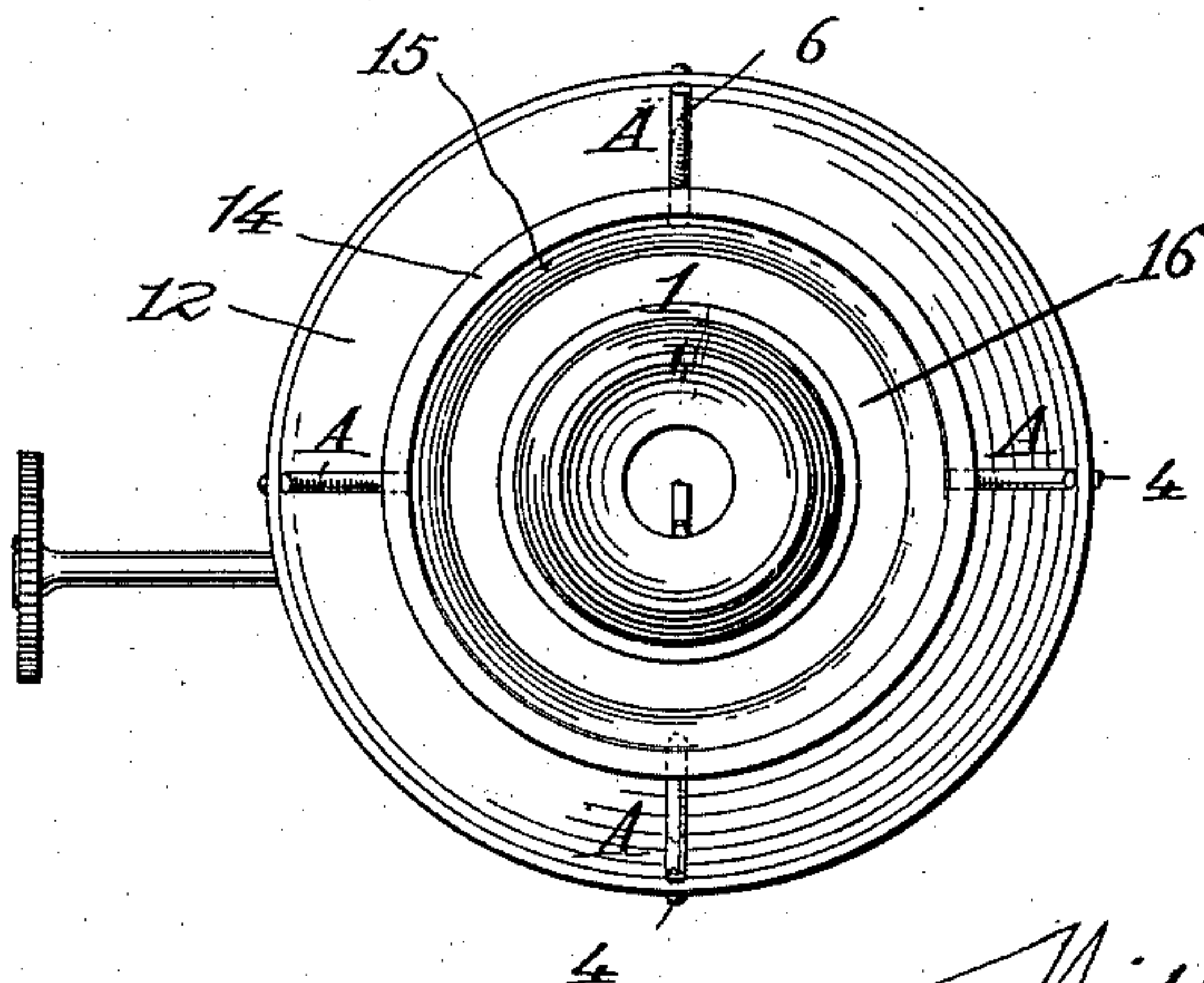


Fig. 2.



Witnesses

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By

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UNITED STATES PATENT OFFICE.

WILLIAM S. HAMM, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE ADAMS
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LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 750,455, dated January 26, 1904.

Application filed August 3, 1903. Serial No. 168,083. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. HAMM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Lamp-Burners, of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

This invention is designed for use with such switch, semaphore, and other stationary signal lamps employed in railroad signaling as are intended to be supplied with oil only at long intervals—say from seven to eight days—and to remain without attention—such as is required for trimming of the wick, cleaning of the burner, &c.—for an equal length of time. One of the difficulties which attend the use of such a lamp is that the chimney when braced by the wires ordinarily used at the base is under the vibration to which such a lamp is exposed in service caused to creep up to such an extent that it will fall out from the wires and become broken and sometimes fall upon the light and extinguish it. If, on the other hand, the wires are made so loose that the chimney will hold to its position by gravity or its own weight, if the switch-stand is operated with more than ordinary force the jar will throw the chimney out of the wires and cause it to be destroyed. One of the purposes of my invention is to overcome these objections. Furthermore, it has been found essential to the successful support of the chimney of a lamp of this class that its gallery shall be rigid and firmly secured to the base of the burner and that the chimney-supporting wires, while having the necessary elasticity, shall still be rigidly held at their bases.

A feature of my invention therefore relates to the joint construction and arrangement of the gallery and the wires which support it and also serve to hold the chimney in place.

It is necessary that my improved chimney-holder be used with a specially-constructed chimney—that is to say, one having a small groove near its base, into which groove the upper curved ends of the wires are adapted to

fit. Thus the chimney while securely grasped by the wires is mainly held at but one point in its height—that is to say, at the grooved portion. It is also essential that the gallery shall be so arranged as to size or diameter that there shall be means provided for a proper circulation of air from under it to the chimney and between the chimney and the burner-cone.

In the accompanying drawings, Figure 1 is a side view of a lamp-burner having incorporated therewith my improved chimney-holder and showing the relations existing between the latter and the peculiarly-shaped chimney to which it is adapted. Fig. 2 is a plan view.

The base part of the burner is represented by 1, it having a threaded portion 2 of reduced diameter for attachment to the oil-font. The general construction of the burner and its adjuncts being substantially as described and claimed in application, Serial No. 168,092, filed herewith in the names of Mosher and Legge and in application, Serial No. 168,082, filed herewith by me need not be here specifically explained.

Branching from the dome or upper portion of the base 1 are wires A, each of which extending horizontally a short distance is then bent inwardly, as shown at 4, upwardly, as at 5, and finally outwardly, as seen at 6, the end being in some cases extended to form a finger-hold. Usually four of such wires are employed, they forming the support for the chimney-gallery 12, the inner diameter of which is sufficiently greater than that of the burner-cone to enable a proper admission of air from under the gallery to the flame through the annular opening 16. In attaching the gallery 12 to the wires A the latter are run through perforations formed in the gallery, the union being effected by solder or other means. The support given the gallery by the several wires A is of a rigid and permanent character, and this is effected in a simple manner.

The chimney is represented by 14, it being provided with a groove 15 near its lower edge, into which groove the upper curved portions of the several wires A fit, the series of wires thus firmly grasping the chimney mainly at

one point, while its base is firmly sustained by the gallery. It has been found that a chimney thus formed and thus held will not creep up or become detached from the burner by the constant vibration to which the lamp is exposed, and it will be seen by railroad men that an invention of a simple nature, strong in construction, and not liable to derangement which will effect this result is one of importance. It is evident, however, that while my invention is more especially intended for use with what is known as a "long-time" burner-lamp it is equally applicable to lamps of other description.

I do not restrict myself to the exact details of construction, combination, and arrangement herein set forth, it being obvious that minor variations thereof not involving the exercise of invention may be made by the skilled mechanic, and such departures from what is herein described and claimed not involving invention I consider as within the scope and terms of my claims.

Having thus described my invention, I claim—

1. In a lamp-burner, a base, and a series of chimney-supporting wires each branching therefrom and extending upwardly, combined with a gallery supported by said wires, a space being left between the inner diameter of the gallery and the cone, substantially as set forth.

2. In a lamp-burner, a base, and a series of wires each branching therefrom and extending inwardly and upwardly, and each having a final outward bend, combined with a gallery supported by said wires, an annular space being left between the inner diameter of the gallery and the cone, said series of wires being adapted to fit and support a chimney having an annular groove, substantially as set forth.

In testimony whereof I hereunto set my hand and seal.

WILLIAM S. HAMM: [L. s.]

Witnesses:

LOUIS F. EGGERT,

THOS. G. TROXEL, Jr.