T. RAYMOND.

Burner for Kerosene Lamps.

No. 38,537. Patented May 12, 1863.

Fig. 3.

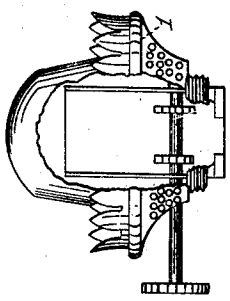


Fig. 2.

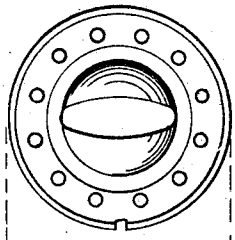


Fig. 1.

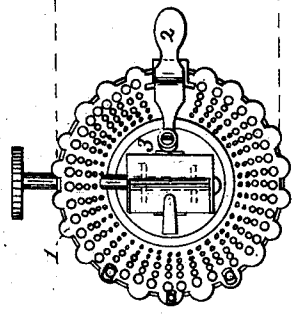
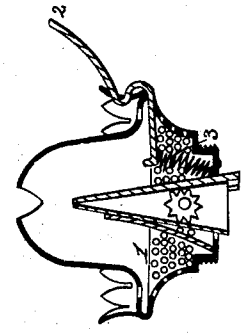


Fig. 4.



Witnesses:

Chas. E. Hove.

H. A. Albee

Inventor:

Timothy Raymond

By Thos. P. Howe Atty

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

TIMOTHY RAYMOND, OF BROOKLYN, ASSIGNOR TO HIMSELF AND SAMUEL DIETZ, OF NEW YORK, N. Y.

IMPROVEMENT IN BURNERS FOR KEROSENE-LAMPS.

Specification forming part of Letters Patent No. **38,537**, dated May 12, 1863.

To all whom it may concern:

Be it known that I, TIMOTHY RAYMOND, of Brooklyn, in the county of Kings and State of New York, have invented a certain Improvement in Burners for Kerosene Lamps; and I do hereby declare the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of this invention consists in combining a spiral spring attached to the flange or base-plate of the burner at one end with the lever or catch which secures the chimney in its place, substantially as hereinafter described.

Figure 1 is a plan of the burner with the cone removed. Fig. 2 is a plan of the cone. Fig. 3 is an elevation of the burner, partly in section. Fig. 4 is a vertical section showing the manner of attachment of the spring and its combination with the lever.

1 is the rim or flange or base plate of the burner. This is constructed in a manner similar in most respects to many in common use.

2 is the lever by which the chimney is secured in position.

3 is the spiral spring by which it is kept in place up against the chimney to secure the chimney in position. The lower end of the spring is extended through the plate, turned under, and the end further secured by soldering. At the upper end of the said spring one of the coils is hooked onto a hook formed at the inner end of the lever 2.

The form of the lever or catch, and its manner of insertion into the burner, is very much the same as that in use in many other lamps, and is sufficiently indicated by the drawings. The construction of other parts of the burner is that or nearly that described in Letters Patent granted to me the 8th day of April, 1862.

Much difficulty has been experienced in providing a simple, cheap, and reliable spring-catch for kerosene burners. The ordinary flat spring has been found unreliable and very apt to break, besides lacking that elasticity necessary to secure the chimney with certainty in its position. The object of this improvement is to avoid that difficulty, and at the same time secure the advantages of the lever in securing the chimney to a lamp. The lever is probably the most conveniently manipulated of any fastening in use, and for that reason is to be preferred. This has been long in use, and so also has the spiral spring, combined with the sliding catch, but I am not aware that a spiral spring has been combined with the lever in the manner I have described—that is, by attaching one end of said spiral spring to the base-plate and the other to the end of the lever. It is obvious, also, that besides the other advantages which this improvement possesses, it is much more easily repaired in case of derangement than the other kinds of catches, as all that is necessary to replace the spring is to loosen it from the bottom plate by melting off the solder, when it can be readily taken out and replaced by a new spring.

Having thus fully described my invention, I claim—

The combination of the lever 2 and the spiral spring 3 in the manner described, the parts being constructed, combined, and operating substantially as set forth.

TIMOTHY RAYMOND.

Witnesses:

L. A. ROBERTS,

THOS. P. HOW.