(No Model.)

W. W. SEELEY.

GAS BURNER.

No. 583,511. Patented June 1, 1897.

Fig. 1.

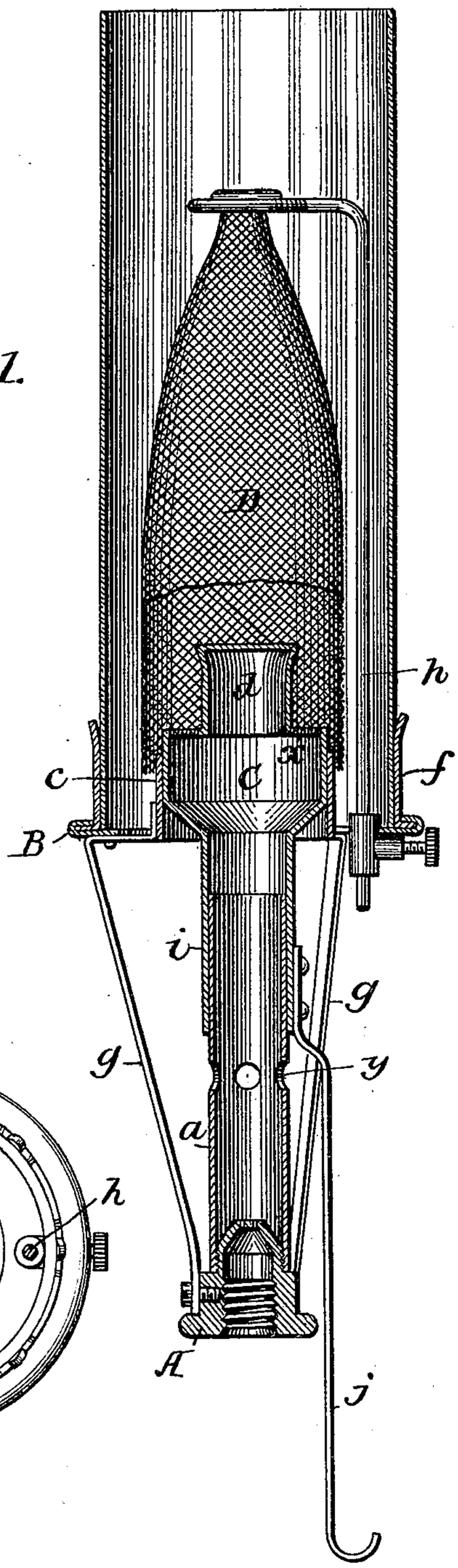


Fig. 2.

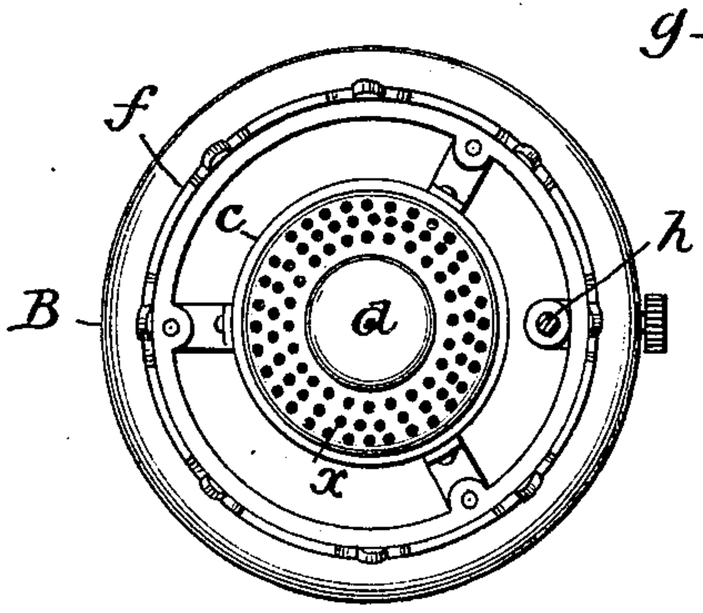
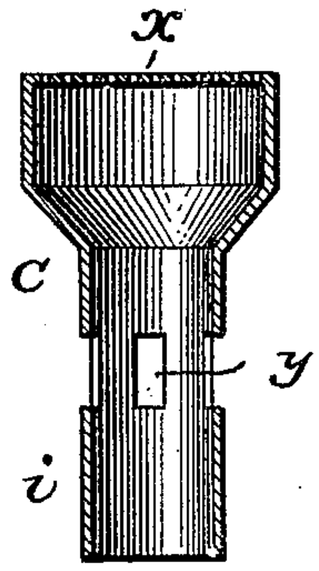


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM WESLEY SEELEY, OF BROOKLYN, NEW YORK.

GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 583,511, dated June 1, 1897.

Application filed February 3, 1897. Serial No. 621,814. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WESLEY SEELEY, of Brooklyn, Kings county, New York, have invented an Improvement in Gas-Burners, of which the following is a specification.

My invention has for its object to avoid the difficulties and objections incident to lighting gas-burners from points above the position of stationary tips and above the holders for the globes or chimneys; and my invention consists of a burner provided with a slide carrying the tip or gas-outlet and capable of being lowered to ignite the gas and then being raised to bring the tip to its normal position, as fully set forth hereinafter and as illustrated in the accompanying drawings, in which—

Figure 1 is a sectional elevation of a gas-burner embodying my improvements. Fig. 2 is a plan view of Fig. 1, and Fig. 3 is a sectional elevation showing my burner in a somewhat different form.

The base A of the burner is constructed in any suitable manner so that it may be attached to the bracket or support, and where there is a chimney or globe the holder B of the same is suitably supported by the base, as, for instance, by means of arms *g* extending between the two.

From the base extends upward a tube *a*, in or upon which slides the tube *i* of a slide C, the latter having at the upper end a suitable tip or gas-outlet. As shown, there is a series of outlets arranged in a ring, as in an ordinary Argand burner, and within this ring is a deflector *d*. In order that the tip or perforated portion *x* may be carried down as low as possible, as described hereinafter, I prefer to make the deflector *d* in the form of a hollow trunk adapted to receive the upper end of the tube *a*, the trunk flaring outward at the upper end to deflect the flame. In some cases, where it is not required to deflect the flame outward, the trunk *d*, while still adapted to receive the end of the tube *a*, may be cylindrical throughout or may be contracted at the upper end.

In order to aid in guiding the slide C, and also to protect the lower edge of a mantle D (when a mantle is used) from being struck and injured by the slide, I provide the holder B with an annular flange *c*, which extends into the lower end of the mantle, the latter being supported at the top by the usual adjustable arm *h*.

It is well known that it is impracticable to light Argand burners or burners which extend into chimneys without either removing the chimney or first turning on the gas and then igniting the latter, or a mixture of gas and air in the chimney, by applying a light at the top of the chimney. This results often in smoking the chimney and frequently in the breaking of the chimney by the explosion of the mixture of gas and air thus igniting, and when mantles are used this explosion frequently results in the fracture of the mantle or in the fracture of the chimney, the pieces of which fracture the mantles.

When the mantle is used with a globe, the introduction of the lighter at the upper end is liable by its contact with the mantle to fracture the latter.

By providing the burner with a slide carrying the tip or gas-outlet I am enabled, by moving down the slide, to ignite the gas at the said tip below the chimney or globe, and below the mantle when the latter is used, and then when the tip is carried upward to its proper position the air is caused to mingle with the gas, thereby avoiding all of the objections incident to igniting the gas from above.

When the slide is used in connection with a mantle, I provide an air-opening *y*, either in the tube *a*, as shown in Fig. 1, or in the outward tube of the slide, as shown in Fig. 3, and there may be a single opening or a series of openings.

In order to support the globe or chimney, I prefer to provide the usual chimney *f*, and in order to operate the slide from below I in some instances provide a pendent handle *j*.

In the construction shown in Fig. 3 I have omitted the deflector, as in some cases this is not necessary, and it will be obvious that the various parts of my burner may be modified in construction and proportions without departing from the main features of my invention.

Without limiting myself to the precise construction and arrangement of parts shown, I claim as my invention—

1. A burner provided with a support for a

chimney or globe, and comprising a stationary tube adapted for attachment to a gas-supply pipe, and a slide having gas-outlets to constitute the burner-tip and movable to and from the said support, substantially as described.

2. A burner provided with a support for a chimney or globe, and comprising a stationary gas-tube, and a slide having gas-outlets to constitute the burner-tip and movable to and from said support, and a deflector above the outlets, substantially as described.

3. A burner provided with a mantle, and comprising a stationary tube, and a slide having gas-outlets to constitute the burner-tip and movable to and from said mantle, substantially as described.

4. A burner provided with a mantle, a base having a perforated tube *a*, a slide provided with a gas-tip and capable of being moved to carry the tip below or within the mantle, and an air-inlet arranged to be covered or uncovered by the movement of the slide, substantially as described.

5. The combination of the base A, adapted for attachment to a gas-supply pipe, and a stationary tube supported thereby, the holder supported above the base, and the slide having the gas-outlets to constitute the burner-tip and provided with a pendent handle, substantially as described.

6. The combination of the base, slide and holder supported above the base and provided with a flange *c* for extending into the mantle, substantially as set forth.

7. The combination of the base, slide, holder and hollow dome *d*, substantially as set forth.

8. The combination of the stationary tube, the holder, and the slide having the gas-outlets and provided with a hollow dome or deflector adapted to be carried down over the end of the tube when the slide is lowered, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM WESLEY SEELEY.

Witnesses:.

W. CLARENCE DUVALL,

PAUL W. STEVENS.