

No. 786,928.

PATENTED APR. 11, 1905.

A. F. WILLIAMS.
GAS LIGHTING DEVICE.
APPLICATION FILED FEB. 26, 1904.

Fig. 1.

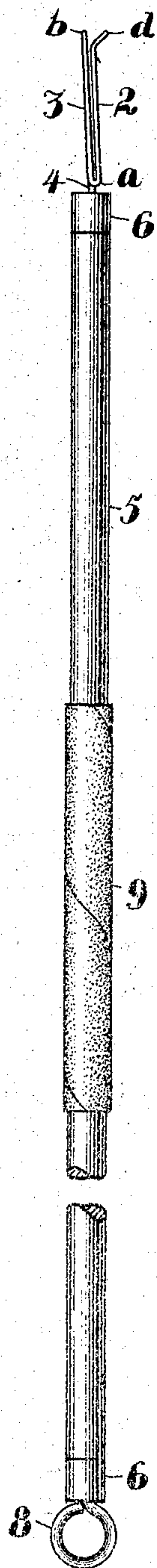


Fig. 2.

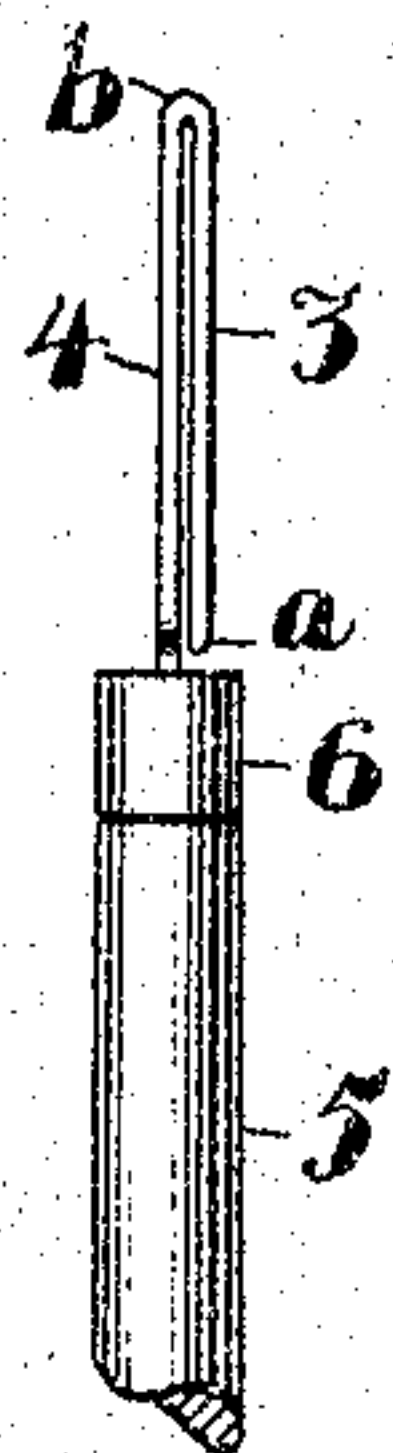
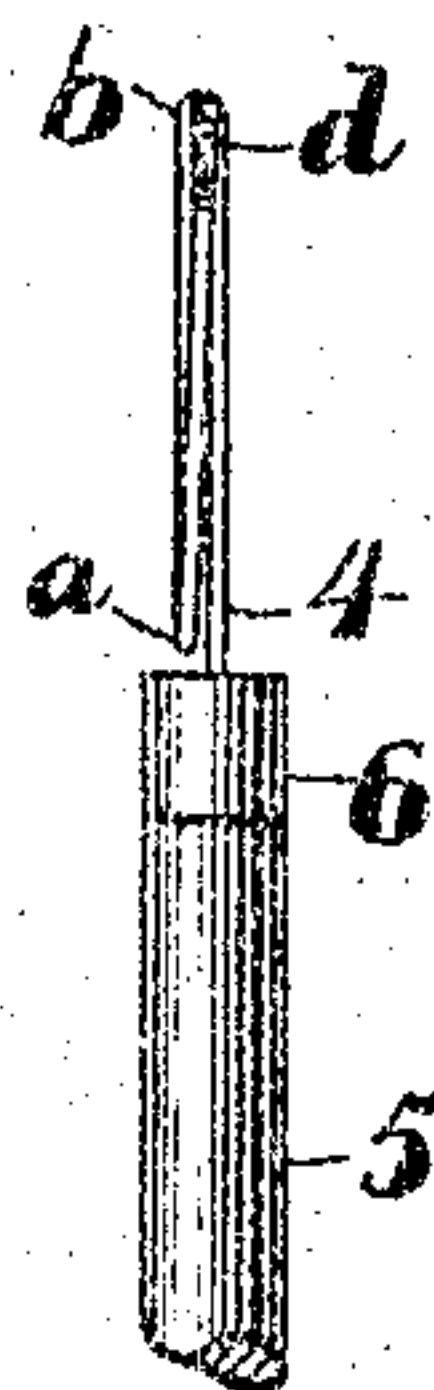


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

ARTHUR F. WILLIAMS, OF BERKELEY, CALIFORNIA.

GAS-LIGHTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 786,928, dated April 11, 1905.

Application filed February 26, 1904. Serial No. 195,417.

To all whom it may concern:

Be it known that I, ARTHUR F. WILLIAMS, a citizen of the United States, residing at Berkeley, in the county of Alameda and State of California, have invented new and useful Improvements in Gas-Lighting Devices, of which the following is a specification.

My invention relates to a device which is designed for lighting gas and especially in connection with what are known as "Welsbach" burners, in which a chimney extends the point of lighting so high as to be out of ordinary reach, while the gas-key may be within reach.

My invention consists in the combination and arrangement of parts and in details of construction, which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 shows my device. Fig. 2 is a view of the spring-wire looking from the left of Fig. 1. Fig. 3 is a view of spring-wire looking from the right of Fig. 1.

It is the object of my invention to provide a means for holding matches, tapers, or like igniters so that they may be extended to ignite gas from burners or apparatus which is otherwise beyond the reach of an ordinary person.

In carrying out my invention I employ small spring-wire, which may conveniently be No. 19, Stubbs gage, and this is bent upon itself so as to form a plurality of substantially parallel elastic wires so disposed that they serve to clamp and hold a match, which is placed between the wires so as to stand transversely or diagonally thereto. The wires are bent as follows: First, the wire is bent upon itself, as shown at *a*, so that the two parts 2 and 3 stand substantially parallel with each other. Secondly, at a suitable distance from the bend *a* the wires are again bent upon each other, as at *b*, so that the third portion 4 extends down substantially parallel with the first two portions 2 and 3. The distance between the bends *a* and *b* may be about one inch, more or less. The end *d* of the wire is bent outwardly at an angle which may be about forty-five degrees, more or less, with the part 3, and the outer end, or *d*, is substantially even with the bend *b* on a line substantially at right angles with

the part 3. The part 4, which returns from the bend *b* to close proximity with the bend *a*, is extended about one-half inch or more beyond this bend, and it is also bent at an angle at this point. This angle may be about ten or fifteen degrees. The parts of the wires 2, 3, and 4 are close together, and at the bends *a* *b* they are separated to form the proper curve. The part 4 crosses diagonally, so as to stand substantially in opposition to the parts 2 and 3, and by means of the outwardly-bent portion *d* a match or taper is easily inserted, so that it will be clamped between these wires 2, 3, and 4 and held in any desired position with relation thereto either substantially at right angles or diagonally, pointing upward or downward when the holder is in a vertical position, as best suits the convenience of use. If desired, the shank or extension of the wire 4 may be continued to such a length as to form in itself a suitable handle, which will enable the user to extend the match after being lighted to a point where it can ignite the gas. In the present case, however, I have shown a handle 5. This handle 5 may conveniently be made about two feet long, of round wood, and one-quarter of an inch in diameter, with metal ferrules 6. The extension of the wire 4 may be sharpened and inserted into a hole in one end of the stick, and at the other end may be fitted a circular loop 8, by which to conveniently hang up the implement when not in use.

In order to conveniently light a match, I have shown a piece of sandpaper 9, which is cut about three-fourths of an inch wide and the ends cut across at such an angle that when the sandpaper has been properly applied the ends will extend substantially around the stick or holder 5.

The application of this device is made as follows: After applying a suitable adhesive glue to the smooth side of the sandpaper either end is placed around the stick at substantially right angles with its length, and the strip being then wrapped around the stick the edges will just contact with each other, thus forming an inclosing tube of sufficient length to furnish the proper surface for igniting the match. The length of the strip thus employed may be about three and five-eighths inches,

and as the edges meet so as to form a substantially smooth and flush surface it will be suitable for the purpose. This sandpaper may be applied at any suitable distance from the
5 end of the stick to which the match-holder is secured, such as three and one-fourth inches, more or less.

If it be desired to include a device for turning the key of the gas-fixture, the stick may
10 be made somewhat heavier, and a forked metal clamp may be secured in the end of the stick, in which case the match-holding clamp may be secured to the side and project therefrom at an angle, so as to conveniently hold a match.

15 Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

As a new article of manufacture a lighting implement consisting of a long handle having
20 ferrules at the ends, and having an intermediate portion provided with an adherent friction-strip spirally wound thereon, whereby its edges meet to form a substantially smooth

and flush surface, and a match-holder fixed to the end of the handle and extending in the di- 25
rection of the length thereof said holder composed of spring-wire bent upon itself to form two members (2 and 3) one standing parallel with the other, one of said members being
30 also bent upon itself to form a third portion (4) which extends substantially parallel with the other members and beyond the first-named bend and is fitted to the ferrule end of the handle, and one of the first-named members
35 crossing diagonally the other members and having its outer end bent outwardly away from said member to form an entrance for the match-stick.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit- 40
nesses.

ARTHUR F. WILLIAMS.

Witnesses:

HENRY P. TRICOU,
S. H. NOURSE.