

No. 648,731.

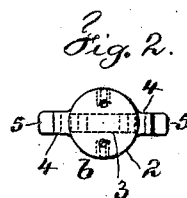
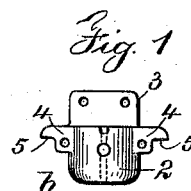
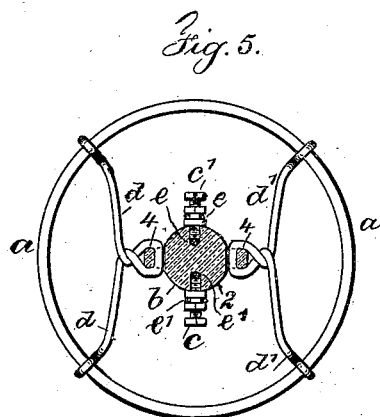
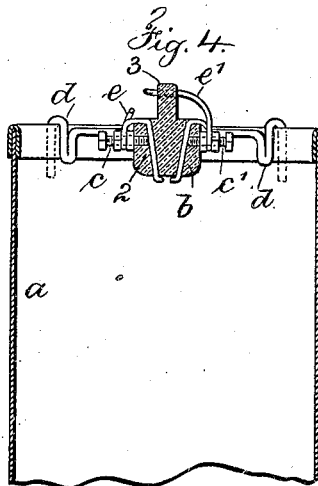
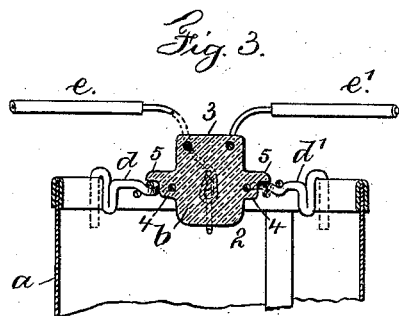
Patented May 1, 1900.

H. C. FARQUHARSON.

APPARATUS FOR ELECTRICALLY LIGHTING LAMPS.

(Application filed Sept. 5, 1899.)

(No Model.)



Witnesses

Chas. H. Smith
Geo. T. Pinckney

Inventor

Henry C. Farquharson

per L. H. Lowell & Son

attys

UNITED STATES PATENT OFFICE.

HENRY C. FARQUHARSON, OF NEW YORK, N. Y.

APPARATUS FOR ELECTRICALLY LIGHTING LAMPS.

SPECIFICATION forming part of Letters Patent No. 648,731, dated May 1, 1900.

Application filed September 5, 1899. Serial No. 729,403. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. FARQUHARSON, a citizen of the United States, residing in the city, county, and State of New York, have invented an Improvement in Apparatus for Electrically Lighting Lamps, of which the following is a specification.

My present invention is designed as an improvement upon the device shown and claimed in Letters Patent granted to me June 20, 1899, No. 627,106. In the device of said patent spark-points were supported from and above the lamp-chimney, but at such a height that the ignition of the gas was not always effected; and the object of my present invention is to insure the ignition of the gas at every attempt to light the same, and to accomplish this I find it necessary to bring the spark-points down within and below the top of the chimney.

In carrying out my present invention I not only support the spark-points in a holder of fireproof non-conducting material centrally of the chimney and at or within the top of the chimney to insure the lighting, but I employ a holder of peculiar construction to facilitate the connection of the supports and the electric conducting-wires, so as to fully effect the operations sought. The holder, of fireproof non-conducting material, preferably comprises a main body portion with a central vertical flange rising from the same and with perforated lugs. The body portion is perforated for the respective ends of the electric conducting-wires that pass down through the said perforations and the ends of which form the spark-points. The flange provides a convenient attachment and guide for the electric conducting-wires, and the perforated lugs are employed to receive the supporting-arms, so that the holder is connected to the arms, and the ends of the arms are bent over to straddle the upper end of the chimney in supporting the holder in place.

In the drawings, Figure 1 is an elevation of the holder, and Fig. 2 an inverted plan of the same. Fig. 3 is a vertical section and partial elevation representing the holder supported in place upon the chimney. Fig. 4 is a similar view at right angles to the position shown in Fig. 3, and Fig. 5 is a sectional plan of the parts in the position shown in Fig. 3.

The chimney *a* is of mica or glass and similar to the one specified in my aforesaid patent and the same as those used in such devices in the arts. The holder *b* is to be made of feldspar, lava, porcelain, or other fireproof non-conducting material, and the same comprises a cylindrical body portion 2, having a central vertical transverse flange 3 rising therefrom and perforated lugs 4 upon opposite sides. The body 2 is perforated from opposite sides of the flange 3 for the electric conducting-wires *e e'*, and the vertical flange 3 is preferably perforated also for the said wires to pass through and which flange for this purpose becomes a guide for the said wires. The body 2 is also perforated from opposite sides horizontally and the openings are threaded for the screws *c c'*. The supporting-arms *d d'* are passed through the perforations in the lugs 4, and they are twisted so that their respective ends are about of equal lengths, the respective ends being bent into hook form, so as to set over or straddle and rest upon the upper edge of the chimney *a* and therefrom support the holder *b*. These lugs 4 are provided with overhanging portions 5, that rest upon the supporting-arms above the twisted portions, so as to prevent the connections of said arms to the holder acting as hinges.

The conducting-wires *e e'* are preferably brought down from above the chimney to opposite sides of the vertical flange 3 and are passed through the openings therein and then down through the openings in the body 2 of the holders, where the ends terminate as spark-points bent in a direction toward one another, but not touching.

The screws *c c'* are brought up against the wires in the body of the holder, so as to clamp the same in place and prevent the moving of the spark-points. The electric conducting-wires may also be given a twist around the stems of the screws *c c'* to insure their maintaining their position, in which case they lie in grooves in the upper surface of the body between the holes in the body and the screws *c c'*.

The parts are so arranged that the holder is approximately central in the chimney, and the spark-points on the under side thereof are below the upper edge of the chimney. This position makes certain the ignition of

the gases by the electric spark, as the ignition occurs in the chimney rather than outside the same, as was the case in my aforesaid patent.

5 I claim as my invention—

1. The combination with the chimney, of a spark-point holder of fireproof non-conducting material having perforated lugs at opposite sides, supporting-arms passed through
10 the said lugs and twisted so that their ends are of approximately-equal length and are extended and provided with hooks to span and engage the chimney, substantially as set forth.

15 2. A spark-point holder, comprising a body portion perforated for the electric wires and having opposite perforated lugs and overhanging portions and connections for the electric conducting-wires, of arms connected to
20 the perforated lugs and twisted beneath the overhanging portions of the holder with the

ends extended to span the chimney and terminating in hooks to straddle the upper edge of the chimney and thereby support the holder, substantially as set forth. 25

3. The combination with the chimney and supporting-arms, of a spark-point holder of fireproof non-conducting material comprising a cylindrical body portion perforated for the electric conducting-wires, screws passing
30 into the body of the holder for clamping the wires, a central vertical flange rising above the cylindrical body and serving as a guide for the electric wires and a separator therefor to prevent a short circuit, and perforated
35 lugs for connection with the supporting-arms, substantially as set forth.

Signed by me this 1st day of September, 1899.

HENRY C. FARQUHARSON.

Witnesses:

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