No. 637,057. Patented Nov. 14, 1899.

C. D. WRIGHT.

ELECTRIC IGNITER.

(Application filed July 2, 1898.)

(No Model.)

Fig. 1.

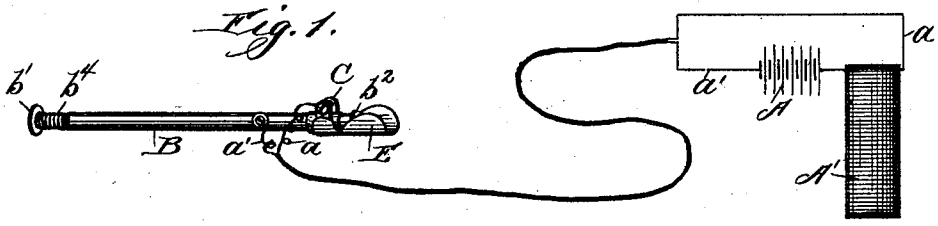


Fig. 2

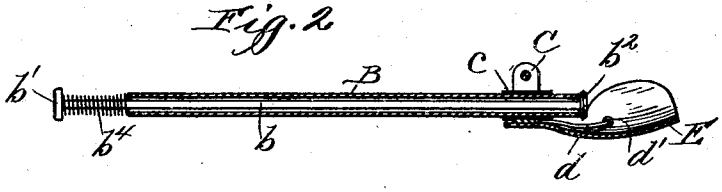
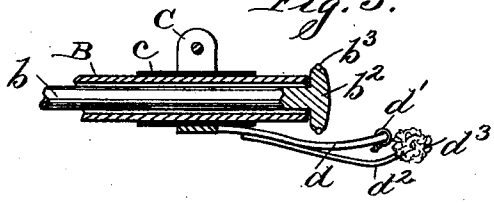


Fig. 3.



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UNITED STATES PATENT OFFICE.

CHARLES D. WRIGHT, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE ADVANCE SPECIALTY COMPANY, OF SAME PLACE.

ELECTRIC IGNITER.

SPECIFICATION forming part of Letters Patent No. 637,057, dated November 14, 1899.

Application filed July 2, 1898. Serial No. 685,001. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. WRIGHT, 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 Electric Igniters, of which the following is a specification.

This invention relates to improvements in that class of devices used for igniting gases and other easily-ignitible substances in which the ignition is caused by an electric spark, and while it is more especially designed to be employed for lighting gas and gasolene in stoves and ranges, yet it may be used as an igniter for other purposes; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

Heretofore it has generally been the custom to light the gas and gasolene in stoves and ranges in which they are used by means of ordinary matches, and after so doing the burning portions of the matches are tossed to one side or thrown on the floor, frequently causing fires and sometimes explosion of the vessel containing the gasolene.

The principal object, therefore, of my invention is to provide a simple and efficient igniter for gas and gasolene and other ignitible substances which by reason of the construction and operation of its parts may be conveniently and safely used by any one without danger of producing extraneous fires or explosions.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a view in elevation of my igniter, showing its parts connected to an electric battery and in position ready for use. Fig. 2 is a longitudinal sectional view of the igniter detached from its electric connections. Fig. 3 is a similar view of a portion of the igniter, showing a modification in its construction.

Similar letters refer to like parts throughout the different views of the drawings.

A represents an electric battery of the ordinary or any preferred construction, having a coil A′ and conducting-wires a and a', one of which, a', is connected to the handpiece B of the igniter, which is preferably tubular in form and has passing therethrough a rod b, which is rotatably secured therein, provided at one end with a button b' and at its other end with a head b^2, around the periphery of which is secured a wire b^3 of any suitable material, but preferably of platinum, which arrangement permits the rod to be turned so as to present a new contacting surface to the other contact-point. The other conductor a is secured to a clamp C, which embraces the handpiece or tube B and is separated therefrom by means of a suitable insulating-piece c. Between the button b' on the rotatable rod b and the adjacent end of the handpiece or tube B is located a spring b^4, which serves to retract the said rod after it has been pressed forward.

Secured to the clamp C and extending forwardly therefrom is a metallic arm d, which is preferably provided at its free end with a piece of platinum d' to contact with the wire b^3 on the head b^2 of the push-rod. Secured to the clamp C also is a hood or shield E, which extends beyond and partially surrounds the head b^2 of the push-rod when it is pressed forward and is employed for the purpose of encompassing and retaining a sufficient quantity of gas and also to direct the spark so as to render the ignition positive or certain. I may, however, omit the hood, and in using my igniter for gasolene may secure to the arm d, as shown in Fig. 3 of the drawings, or to the clamp C another arm d^2, having on its free end a quantity of absorbent material d^3 of any suitable but non-combustible kind, and preferably asbestos, to absorb and retain a quantity of gasolene and to hold it near the point at which the spark is produced, thus affording a sure and positive means of ignition.

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

The combination with an electric battery, of a tubular handpiece electrically connected

with the battery, a spring-actuated rod located in said piece and having at its front end a contact-point, a clamp or collar surrounding the tubular handpiece and insulated therefrom and electrically connected with the battery, an arm extending from the clamp or collar forwardly and having at its end a contact-point, and provided with means to retain the substance to be ignited near said point, substantially as described.

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