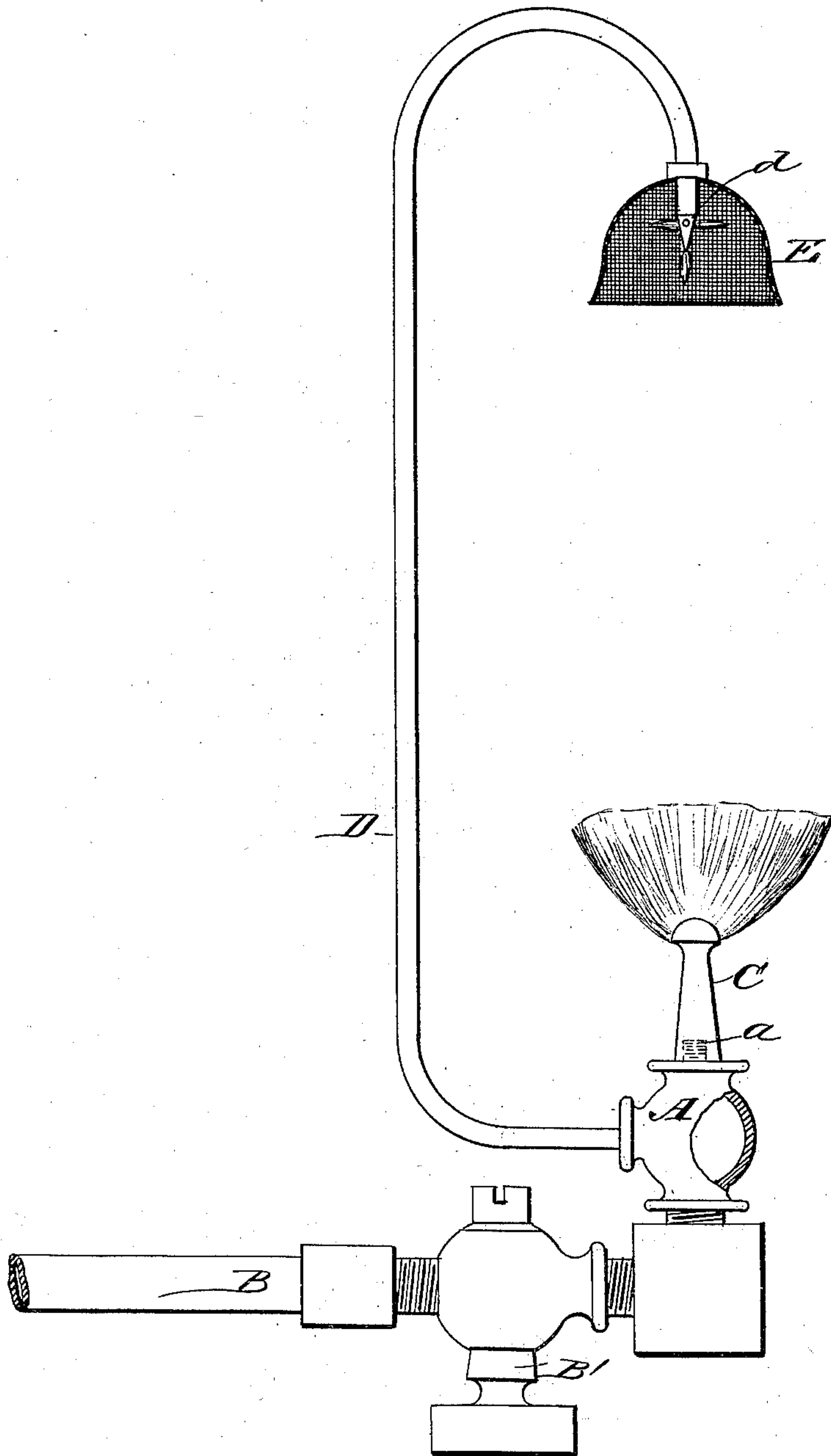


(No Model.)

R. P. WILLIAMS.
SAFETY ATTACHMENT FOR GAS BURNERS.

No. 416,979.

Patented Dec. 10, 1889.



WITNESSES:

J. M. Arroll
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UNITED STATES PATENT OFFICE.

RAY P. WILLIAMS, OF BOISÉ CITY, IDAHO.

SAFETY ATTACHMENT FOR GAS-BURNERS.

SPECIFICATION forming part of Letters Patent No. 416,979, dated December 10, 1889.

Application filed November 20, 1888. Serial No. 291,363. (No model.)

To all whom it may concern:

Be it known that I, RAY P. WILLIAMS, of Boise City, in the county of Ada and Territory of Idaho, have invented a new and Improved Safety Attachment for Gas-Burners, of which the following is a full, clear, and exact description.

My invention relates to an improved safety attachment for gas burners and fixtures, and has for its object to provide a means whereby the gas will be immediately relighted should the flame from the burner be blown out by a thoughtless person.

My invention is an improvement in the class of gas-burners having a relighting attachment.

The features constituting the improvement are as hereinafter described.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which the figure represents the application of my device to a gas-bracket.

In carrying out the invention, a tubular pillar A is screwed upon the outer end of the service-pipe B of a gas bracket or chandelier in advance of the stop-cock B', which pillar is connected with said service-pipe at its lower end and provided at its upper end with a nipple *a* to receive the burner C. An auxiliary or branch service-pipe D is introduced into one side of the pillar, carried upward, and curved downward to a vertical alignment with the burner. The upper extremity of the said service-pipe, which is located a suitable distance above the burner, terminates in a preferably conical tip *d*, provided usually with an aperture in the point and in the sides. The tip *d* is protected by a hood E, open at the bottom, the said hood being ordinarily constructed of wire-gauze.

It will be observed in operation that when the gas is turned on at the stop-cock it is fed

to both the burner C and tip *d*, and that when the gas is ignited at the said burner C it will also ignite at the tip above the same. Thus should the flame by any possibility be blown out at the burner the column of escaping gas ascending will be immediately relighted, thereby re-establishing a flame at the regular burner.

To more definitely indicate the state of the art, I will add that an auxiliary gas-conducting tube has been pivoted to a service-pipe and extended upward so that its tip may be brought into close proximity to the burner for relighting the latter. A piece of spongy platinum has also been suspended over a hydrogen-gas burner for the purpose of relighting (by chemical union of the hydrogen gas with oxygen condensed in the platinum.)

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

In a relighting gas-burner attachment, the combination, with the service-pipe B, having stop-cock B' and the ordinary burner C attached to said pipe, of the auxiliary gas-pipe D, connected with the service-pipe between the said cock and burner and held rigidly in vertical position, its downwardly-bent upper end being arranged directly over and in alignment with said burner, and provided with an apertured tip, as shown and described, whereby gas may be simultaneously admitted to and shut off from said burner and tip by means of a single cock, and whereby, if the flame of the burner is extinguished, (without turning the cock,) the said tip will remain ignited, and thus quickly relight the burner, as specified.

RAY P. WILLIAMS.

Witnesses:

A. D. FOOTE,
P. D. WILLIAMS.