

No. 628,708.

Patented July 11, 1899.

H. D. GUE.
GAS BURNER.

(Application filed Apr. 10, 1899.)

(No Model.)

Fig. 1.

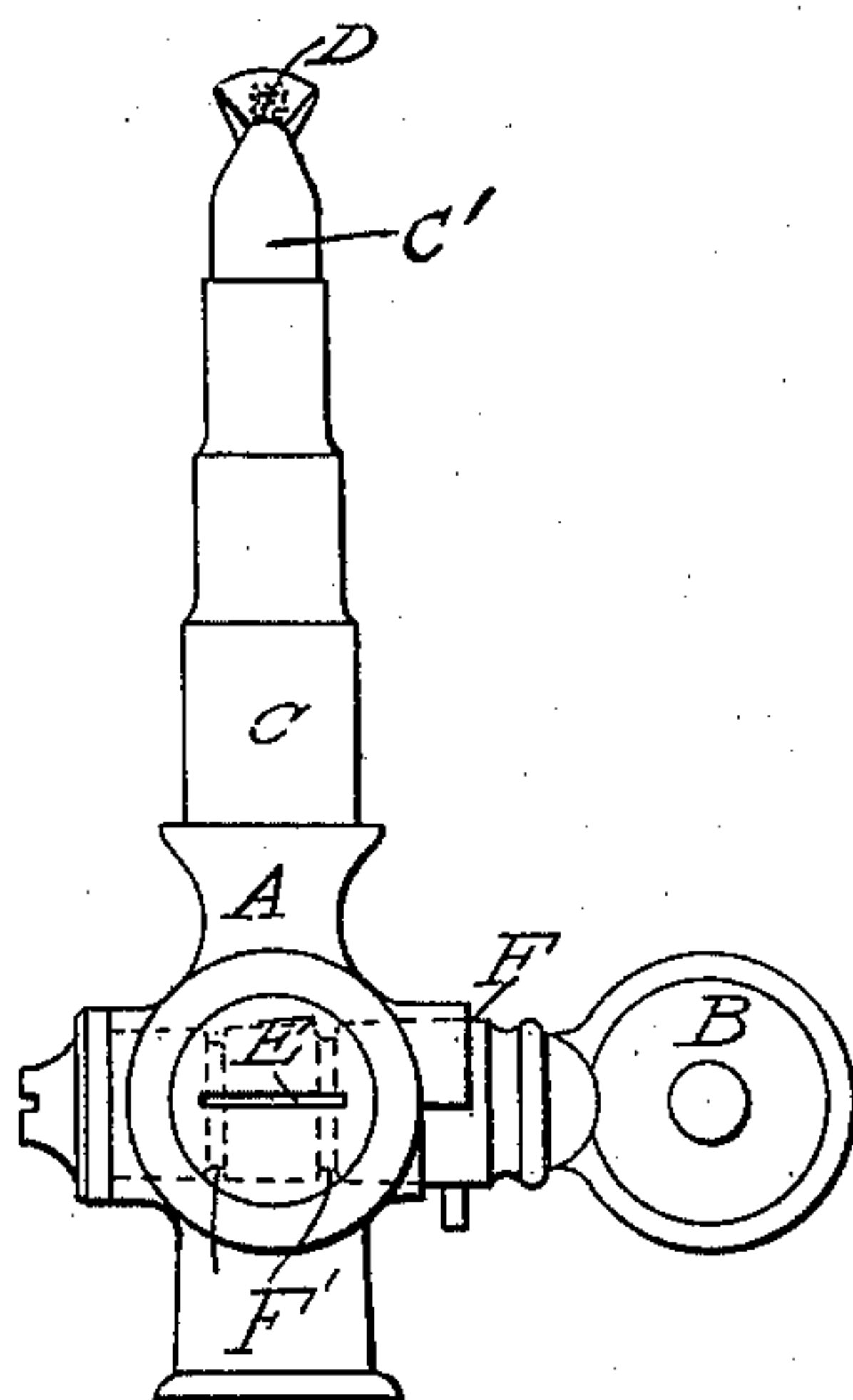


Fig. 2.

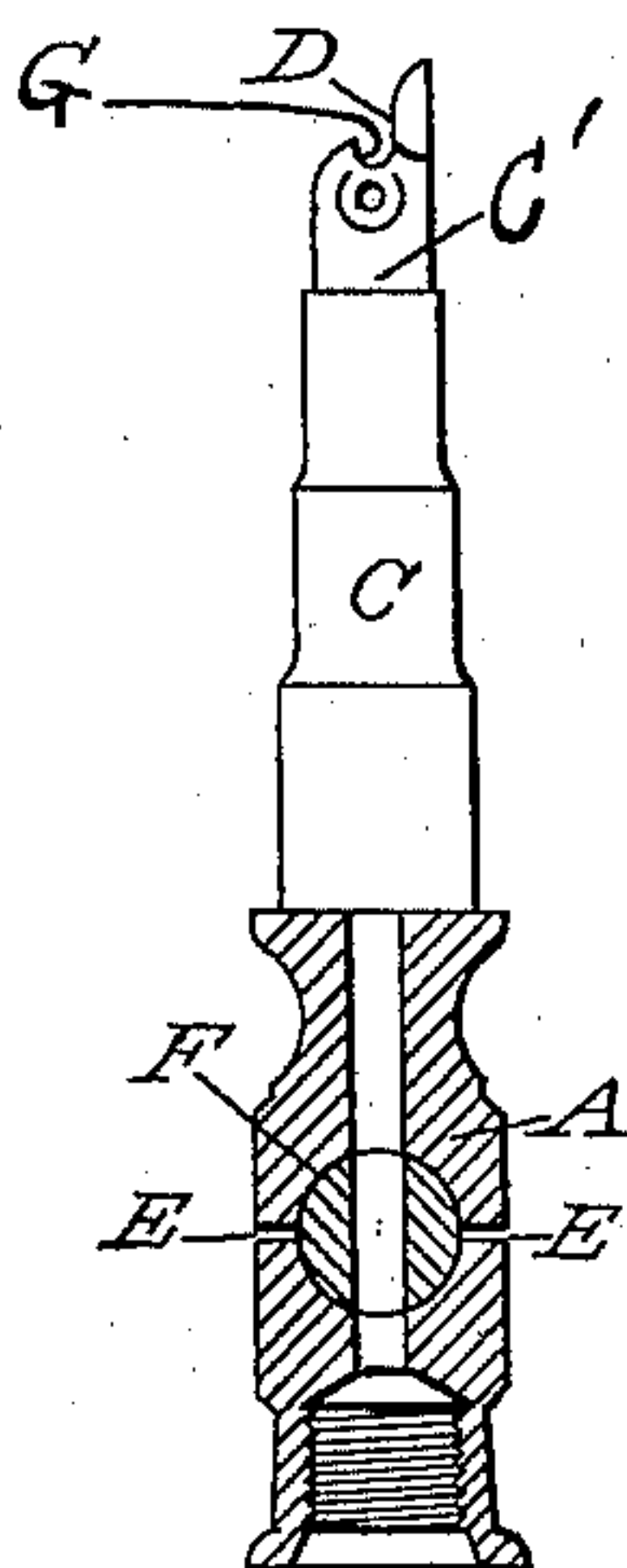
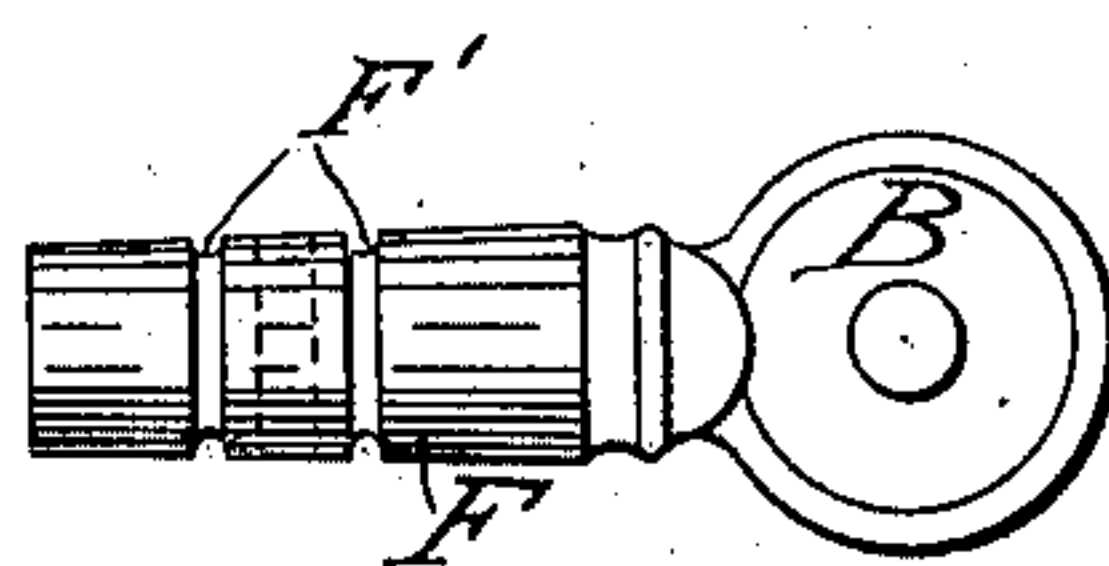


Fig. 3.



WITNESSES:

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HARRY D. GUE, OF NEW YORK, N. Y., ASSIGNOR TO FRANK J. PRICE AND
DAVID J. GUE, OF SAME PLACE.

GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 628,708, dated July 11, 1899.

Application filed April 10, 1899. Serial No. 712,366. (No model.)

To all whom it may concern:

Be it known that I, HARRY D. GUE, a citizen of the United States, residing at New York, (Brooklyn,) county of Kings, State of New York, have invented certain new and useful Improvements in Gas-Burners, of which the following is a full, clear, and exact description.

My invention relates to an improvement in gas-burners, and particularly to that class of burners which are self-lighting, and my object is to improve the construction of the same. One of my special objects is to provide in such a burner some means for conducting away the gas which leaks by the valve when the same is closed, so that it will not pass through the burner. I have found that there is a more or less leakage of gas through the ordinary gas-valve when the same is closed. In a self-lighting gas-burner which carries a catalytic material, such as spongy platinum near the tip thereof, I have found that a small amount of gas will leak past the valve and act upon the catalytic material, and although it may be insufficient to cause a visible catalytic action thereon it has a tendency to temporarily impair, if not entirely suspend, the igniting properties of the said material. I have found that when in such a burner this leakage of gas is allowed to come in contact with the catalytic material the gas will often not be ignited thereby when the valve is opened. I have therefore provided a means whereby this leakage of gas may be conducted away from the catalytic material, so that it will not act thereon.

In the preferred embodiment of my invention shown in the drawings, Figure 1 is a front elevation, Fig. 2 a side elevation, partly in section, and Fig. 3 a detail, of my device.

In the above embodiment I provide a gas-burner having a casing A, having a valve-seat therein in which is inserted the plug F.

C is a burner-tube, and C' is a gas-tip having a gas-orifice G and catalytic material D close to the same, so that it will normally come in contact with the gas issuing therefrom when the valve is opened and be raised to incandescence thereby. This plug has a hole therethrough, as is usual, and also grooves

F' therein extending around said plug and located each side of the hole therethrough. The casing has a hole therethrough connecting with the valve-seat and preferably in the form of a slot, such as E. When the valve is closed, any gas leaking past the plug will reach the slots E either directly or by way of the grooves F'. These slots are preferably of a length greater than the width of the gas-passage, as shown. With my device no gas can leak past the valve and come in contact with the catalytic material. Consequently the said material is at all times in proper condition to operate in its normal manner and with certainty of igniting the gas.

It will be obvious that many changes may be made in the embodiment herein disclosed without departing from the spirit of my invention.

What I claim is—

1. In combination a gas-burner having an orifice for the escape of gas, a material near said orifice adapted to be acted upon by the gas from said orifice and raised to a temperature to ignite the same, a valve to substantially cut off the flow of gas to said orifice, and means to conduct gas leaking past said valve away from contact with said material.

2. In combination a gas-burner having a tip with an orifice therein for the escape of gas, a catalytic material near said orifice adapted to ignite the gas from said orifice, a valve to substantially cut off the flow of gas to said orifice, and means to conduct gas leaking past said valve away from contact with said material consisting of a hole through the casing of said valve and connecting with the seat thereof.

3. In combination, a gas-burner having a removable tip with an orifice therein for the escape of gas, a catalytic material carried by said tip and located above and to one side and close to said orifice and adapted to ignite the gas issuing from said orifice, a valve to substantially cut off the flow of gas to said orifice, a slot through the casing of said valve and leading to the valve proper to conduct gas leaking past said valve away from contact with said catalytic material.

4. In combination, a gas-burner having a

removable tip with an orifice therein for the
escape of gas, a catalytic material carried by
said tip and located above and to one side and
close to said orifice and adapted to ignite the
5 gas issuing from said orifice, a valve to sub-
stantially cut off the flow of gas to said orifice,
a slot through the casing of said valve and
leading to the valve proper to conduct gas
leaking past said valve away from contact
10 with said catalytic material, and an annular

groove located to the side of the gas-passage
through the valve and connected with the
aforesaid slot.

Signed at New York, N. Y., this 9th day of
February, 1899.

HARRY D. GUE.

Witnesses:

EMERSON R. NEWELL,
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