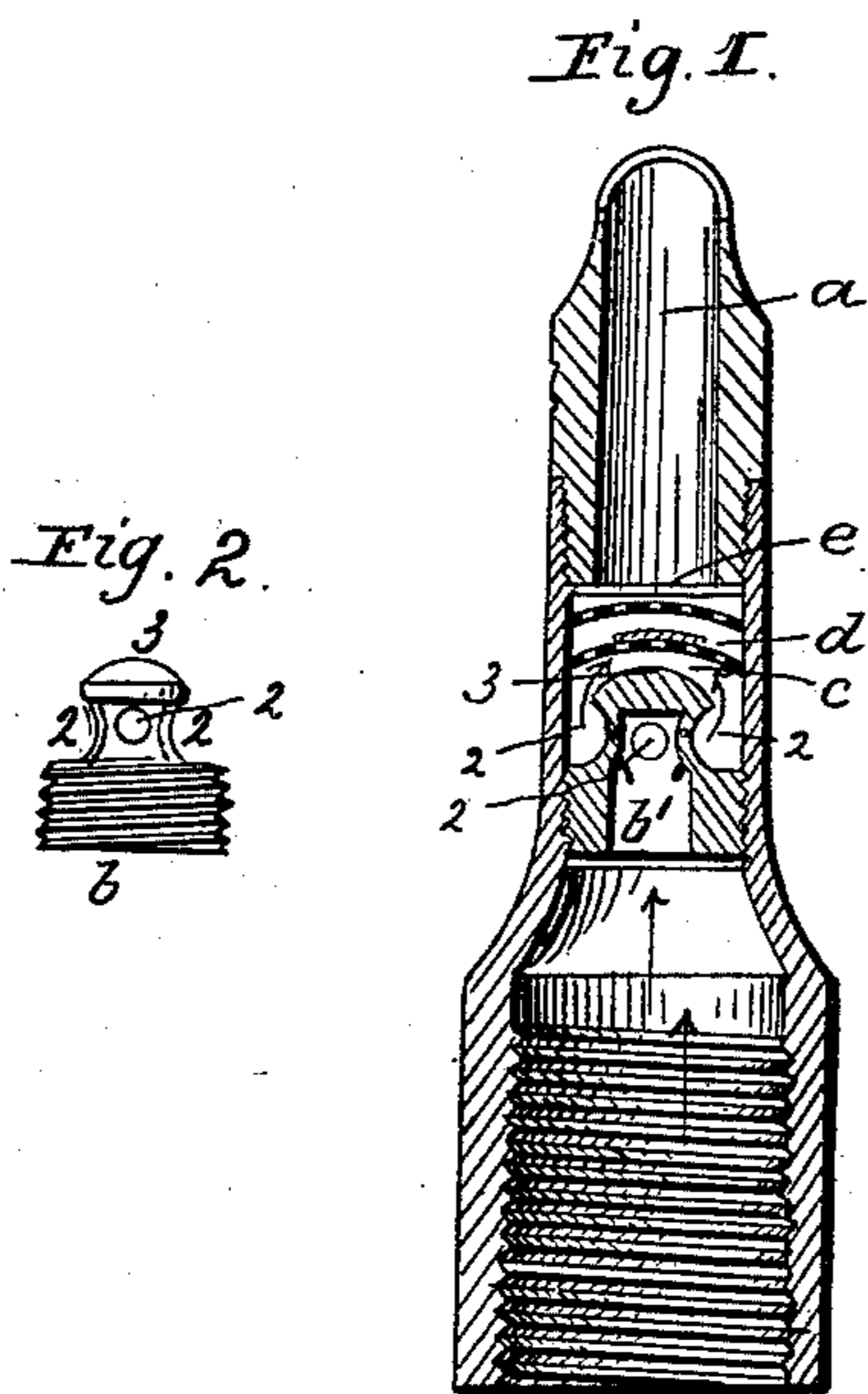


J. POOLE.

Gas Burner.

No. 32,738.

Patented July 2, 1861.



Witnesses:
Lemuel W. Perrell.
Chas. H. Smith.

Inventor:
James Poole

UNITED STATES PATENT OFFICE.

JAMES POOLE, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND JAS. INGRAM, OF
NEW YORK, N. Y.

GAS-BURNER.

Specification of Letters Patent No. 32,738, dated July 2, 1861.

To all whom it may concern:

Be it known that I, JAMES POOLE, of the city and State of New York, have invented, made, and applied to use a certain new and
5 useful Improvement in Gas-Burners; and I do hereby declare that the following is a full, clear, and exact description of the nature of my said invention, reference being had to the annexed drawing, making part
10 of this specification, wherein—

Figure 1, is a vertical section of my burner in large size, and Fig. 2, is an elevation of my deflecting button separately from the burner.

15 Similar characters denote the same parts.

Many gas burners have heretofore been constructed in which valves, diaphragms and other devices have been introduced to check the flow of gas to the burner; almost
20 all of these required the whole burner to be constructed with special reference to the regulating apparatus.

The nature of my said invention consists in a deflector button constructed in a peculiar manner and introduced with a peculiar diaphragm of wire gauze into any ordinary burner, so that the gas is not only retarded and equalized in pressure, but is also heated while in the burner by the heat of
30 said burner, instead of passing so rapidly through the same as to be cold or nearly so upon reaching the flame; thus promoting the perfect combustion of the gas.

In the drawing *a*, is the burner of any

desired character and the opening at the
end thereof may be a slit or holes, for producing either a "bat wing" or "fish tail" flame.

b, is a deflector button fitted within the burner by a screw thread formed therein as
40 represented. This deflector is formed with a central hole 1, with branch side holes 2, 2, beneath the button head top 3.

c, is a diaphragm of wire gauze near or resting upon the top of the button 3, and *d*,
45 is a concave valve or disk between the wire gauze *c*, and a second piece of gauze *e*.

The gas in passing through the button *b*, is deflected horizontally, and the wire gauze
c, and *e*, checks any sudden flow of gas, and
50 the concave disk *d*, also aids in directing the gas toward the inner sides of the burner, which burner being heated raises the temperature of the gas, hence the same is more easily and perfectly consumed.

My whole device is cheap and easily applied to any burner.

What I claim and desire to secure by Letters Patent is—

The deflecting button *b*, wire gauze (*c*, *e*),
60 and disk *d*, applied in the gas burner in the manner and for the purposes specified.

In witness whereof I have hereunto set my signature this eighth day of April 1861.

JAMES POOLE.

Witnesses:

LEMUEL W. SERRELL,
CHAS. H. SMITH.