

R. GILL.
Gas Burner.

No. 94,103.

Patented Aug. 24, 1869.

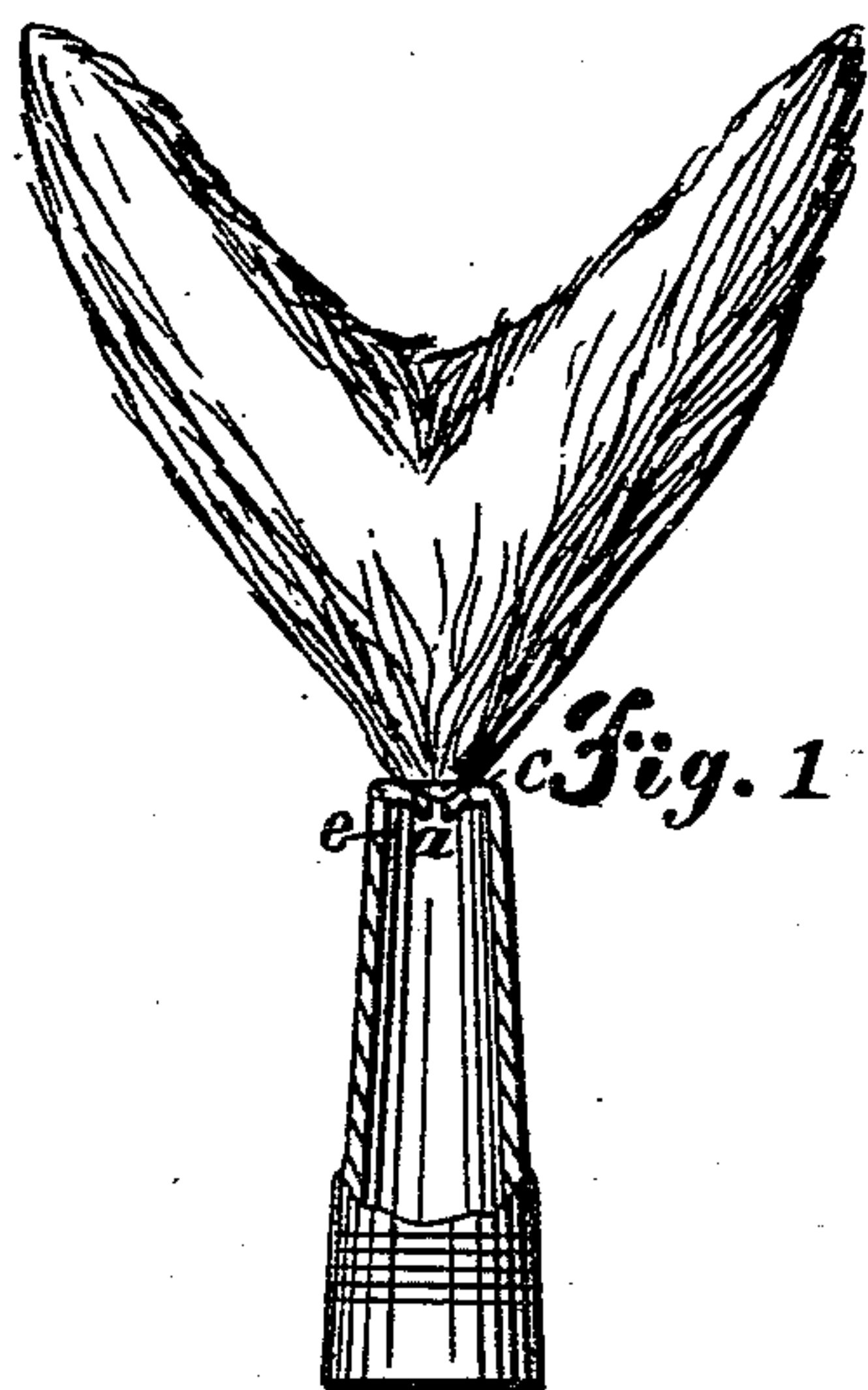


Fig. 1



Fig. 2

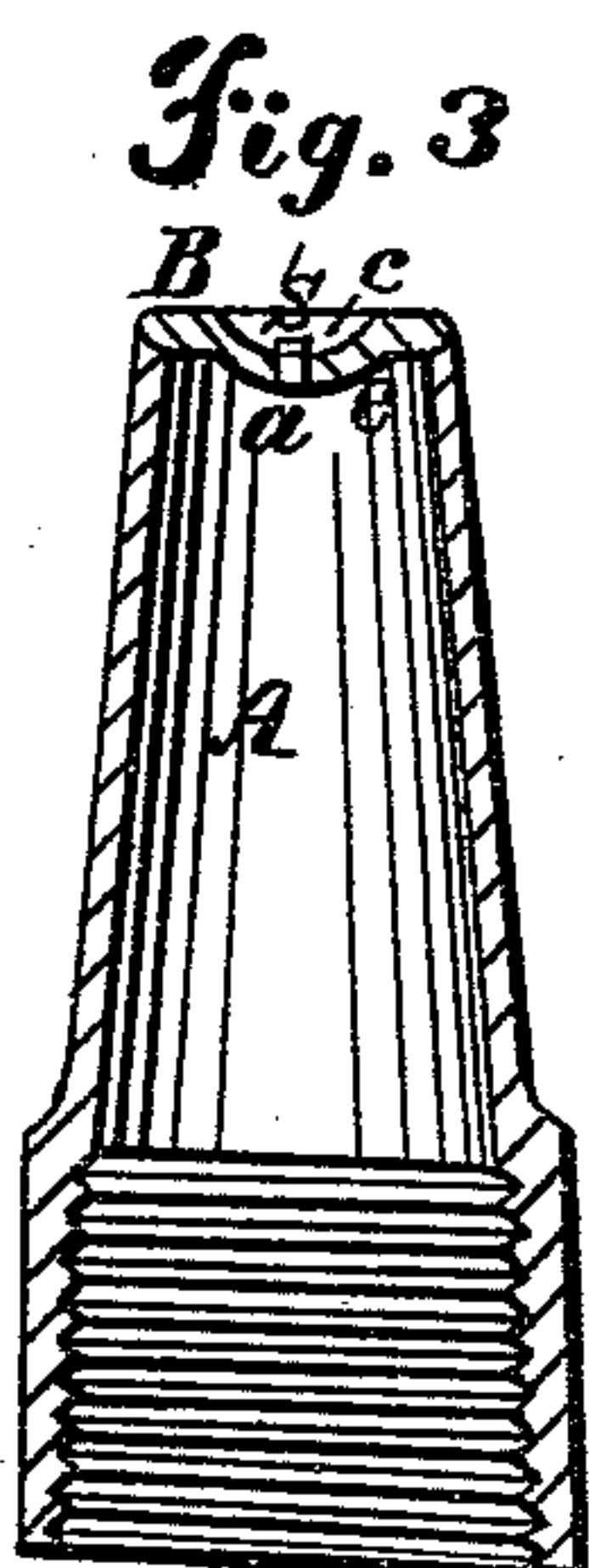


Fig. 3

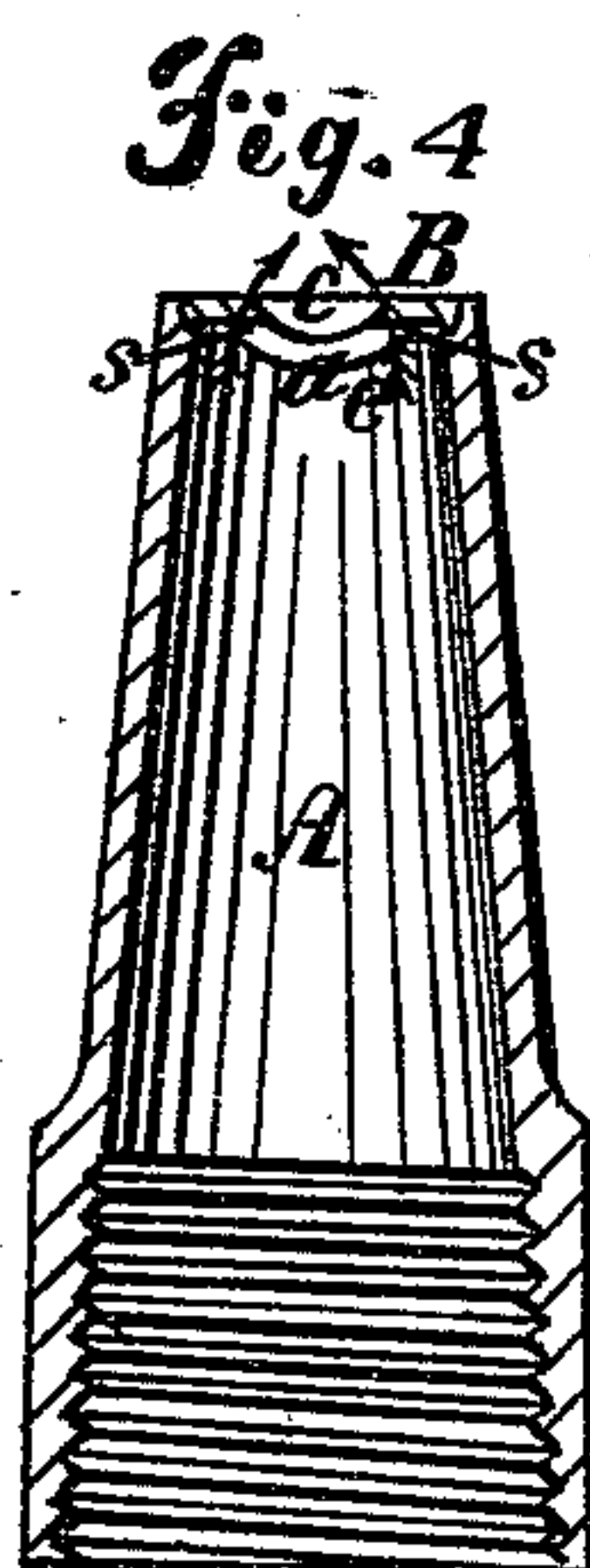


Fig. 4

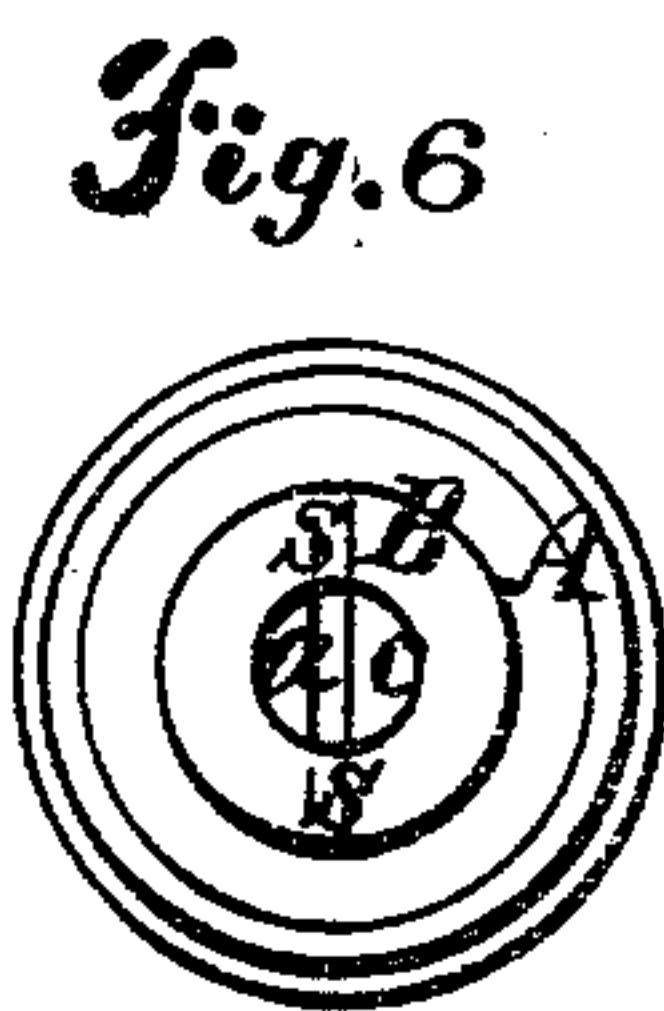


Fig. 6

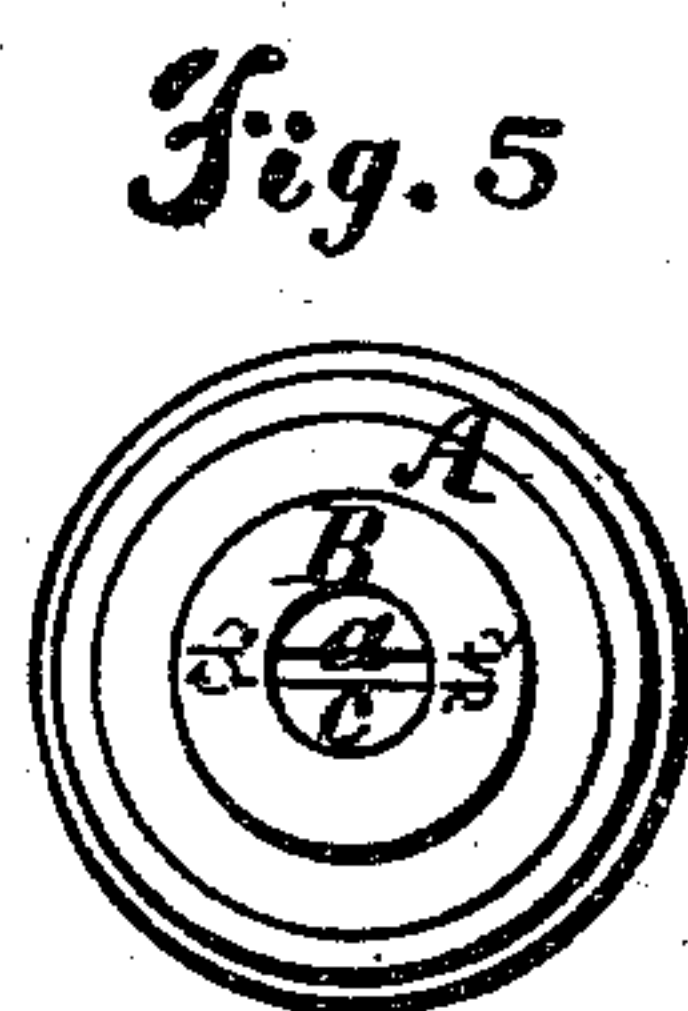


Fig. 5

Witnesses:
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ROBERT GILL, OF NEW YORK, N. Y., ASSIGNOR TO ELLIOTT P. GLEASON, OF SAME PLACE.

Letters Patent No. 94,103, dated August 24, 1869.

IMPROVEMENT IN GAS-BURNERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ROBERT GILL, of the city, county, and State of New York, have invented a new and useful Improvement in Gas-Burner Tips; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form part of this specification, and in which—

Figures 1 and 2 represent longitudinal sections of a burner-tip, constructed according to my invention, taken at right angles to each other;

Figures 3 and 4 represent similar views of the same, somewhat enlarged for sake of better illustration; and

Figures 5 and 6 represent end views thereof, taken at right angles to each other, also enlarged.

Similar letters of reference indicate corresponding parts in the several figures.

The invention relates to a burner which produces a "fish-tail" flame; and

It consists in a novel construction of the tip of the burner, whereby a more satisfactory result is produced, and at a less cost of the tip than with the so-called "fish-tail" burners.

The conical shell or body A, and the end B of this burner-tip, may be constructed in the usual way, of one piece of metal, as represented in figs. 1 and 2, or it may have said parts formed of separate pieces and fitted-together afterward, as shown in figs. 3 and 4, the usual depression *c* being made in the end.

This depression *c* is so formed as to cause a corresponding inward swell or projection, *e*, on the inner side of the end, as also shown.

Centrally across this swell *e* is made an incision or elongated slot, *a*, from the end of which, on the inner side, are formed grooves *s s*.

These grooves *s s* and slot *a* may be formed at the time of constructing the tip, or by a suitably-formed stamp and die after the tip has been otherwise finished, or when the body and end are made of separate parts, as in figs. 3 and 4, the grooves *s s* and the slot *a* may be made in the end-piece B, before its insertion, by a straight cut across its inner surface, by means of a saw or other suitable implement.

By means of the grooves *s s*, two converging currents of gas are conducted into and through the slot *a*, which, when meeting each other at a central point, are caused to spread transversely in the usual way, but so as, when ignited, to produce a more perfectly-formed flame, and consequently a better light.

What is here claimed, and desired to be secured by Letters Patent, is—

The combination of the slot *a* and the conducting-grooves *s s* in the burner-tip, substantially as and for the purpose herein described.

ROBERT GILL.

Witnesses:

FRED. HAYNES,
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