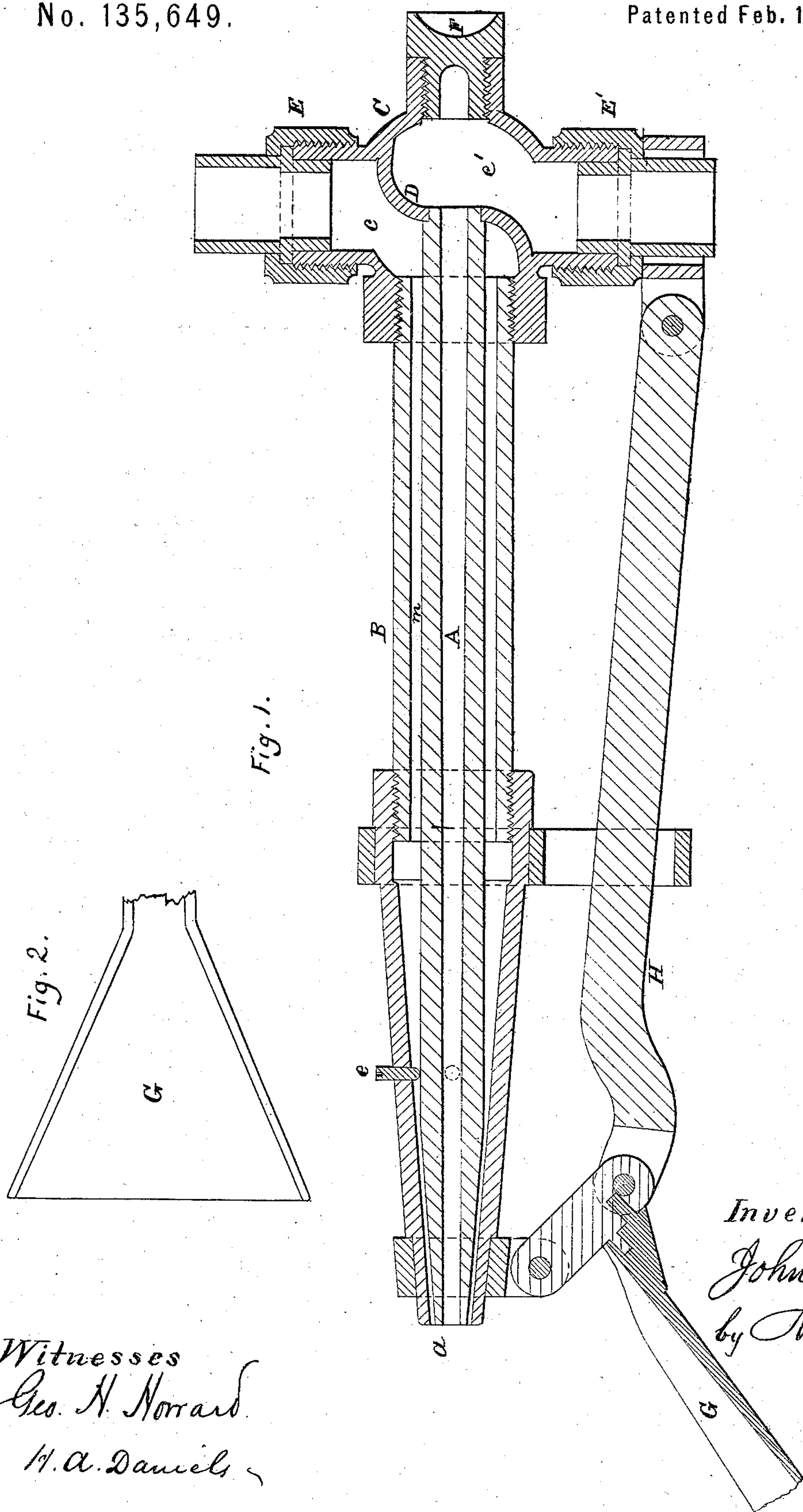


J. LAW.
Tar or Petroleum Burners.

No. 135,649.

Patented Feb. 11, 1873.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN LAW, OF LONDON, CANADA.

IMPROVEMENT IN TAR OR PETROLEUM BURNERS.

Specification forming part of Letters Patent No. 135,649, dated February 11, 1873.

To all whom it may concern:

Be it known that I, JOHN LAW, of London, in the county of Middlesex, Province of Ontario, Canada, have invented certain new and useful Improvements in Tar or Petroleum Burners; and I do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to tar and petroleum burners; and consists in certain improvements and modifications in the details of the construction of the same, as hereinafter shown and described.

In the accompanying drawing illustrating my invention and forming a part of the specification herein, Figure 1 is a vertical longitudinal section of my improved burner. Fig. 2 is a plan view of the fan-shaped spreader detached.

The said burner is constructed of suitable metal, and is of the form shown in the drawing, which also shows the relative arrangement of parts.

Letter A designates the inner tube; B, the outer tube, both extending from the body C, and tapered from the outer extremity to form the nose *a*. D indicates a partition dividing the interior of body C into steam-chamber *c*, and chamber for tar *c'*, the passage for steam and tar to the said chambers being through the couplings E E'. F designates a screw-

plug to body C, the removal of which leaves an aperture therein opposite the inner tube A. G is a fan-shaped spreader attached below the nose *a* to the regulating-support H. This is intended to spread the flow of tar and steam as desired, and also serves to shield the nose of burner from the heat. The center tube A is screwed into partition D, thus forming a passage from tar-chamber *c'*, and is also held in position by the center pins or screws *e*. The outer tube B is screwed into body C and incloses tube A, as shown in drawing.

When the burner is operated, the tar is first turned on by means of a cock connecting at coupling E', and passes into chamber *c'*; thence through center tube A. The steam is turned on through a valve connecting with coupling E, and passes through chamber *c* and space *m* between tubes A and B.

The burner is elevated or depressed, and may be turned in any direction desired, by means of the couplings E E', which may be operated as trunnions for such purpose.

Having described my invention, I claim—

A tar or petroleum burner, consisting of the body C with chambers *c c'*, in combination with tubes A and B, couplings E E', and spreader G, all being constructed and operating as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 22d day of July, 1872.

JOHN LAW. [L. S.]

Witnesses:

H. A. WILKENS,
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