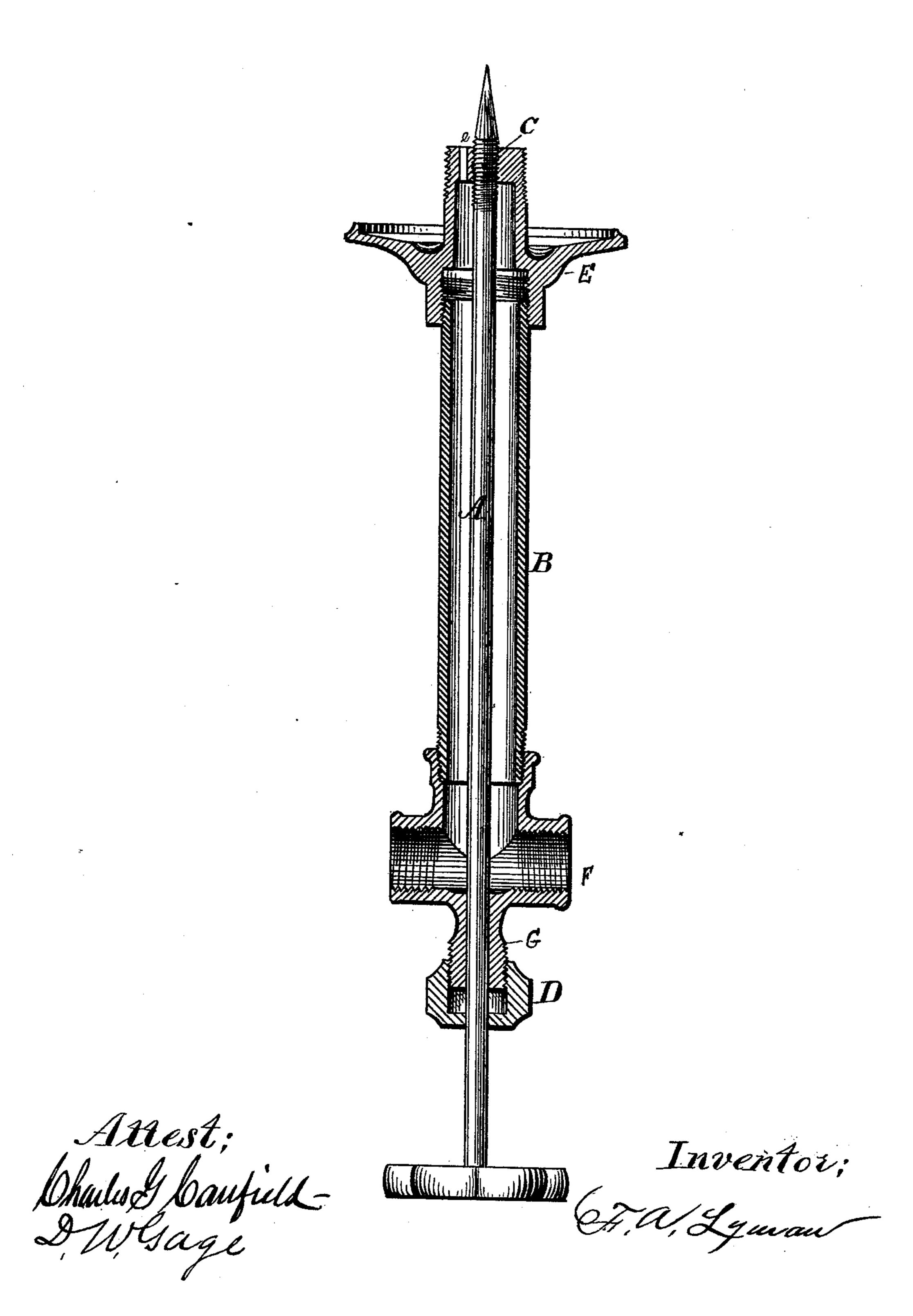
F. A. LYMAN. Gasoline-Burner.

No. 215,009.

Patented May 6, 1879.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

FORDYCE A. LYMAN, OF CLEVELAND, OHIO, ASSIGNOR TO HERBERT TAY-LOR, ROBERT BOGGIS, AND WILLIAM NOTTINGHAM, OF SAME PLACE, ONE-FOURTH TO EACH.

## IMPROVEMENT IN GASOLINE-BURNERS.

Specification forming part of Letters Patent No. 215,009, dated May 6, 1879; application filed December 2, 1878.

To all whom it may concern:

Be it known that I, FORDYCE A. LYMAN, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Gasoline-Burners, which improvements are fully set forth in the following specification and accompanying drawing, in which the figure is a vertical section of a part of a burner containing my improvements.

This invention relates to that class of gasoline-burners in which the stem of the needlevalve is provided near its pointed end with screw-threads, engaging with similar fixed

threads near the base of the cone.

The nature of said invention consists in the combination, with said parts so constructed, of a vapor-generating chamber surrounding said needle-valve stem, substantially as hereinafter set forth.

In the drawing, A designates a needle-valve stem, which is surrounded by a cylindrical vapor-generating chamber, B, the upper end of which is closed by a cap-piece, E. The lower end of hollow cylinder B is attached to a tubular inverted T-shaped coupling, F, through which gasoline is supplied to said hollow cylinder or generating-chamber B. The middle of the bottom of this T-shaped coup-

ling F is provided with a downward extension, G, which is perforated to allow the passage of the smooth valve-stem A. On this extension is fastened by screw-threads a removable packing-box, D, which is also perforated to allow the working of said valve-stem. The other end of valve-stem A is screw-threaded at C, near its point, and works through the screw-tapped upper part of piece E. The latter is also suitably perforated at e, near the base of said point, so as to allow the vapor to pass up from generating-chamber B to the burners. (Not shown.)

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

The combination, with needle-valve stem A, screw-threaded near its point, of cylindrical gas-generating chamber B, surrounding said valve-stem, screw-tapped cap-piece E, packing-box D, and T-shaped tubular coupling F, having solid downward extension G, adapted to allow the passage of the smooth part of the valve-stem through it, substantially as set forth.

F. A. LYMAN.

Witnesses:

C. G. CANFIELD,

D. W. GAGE.