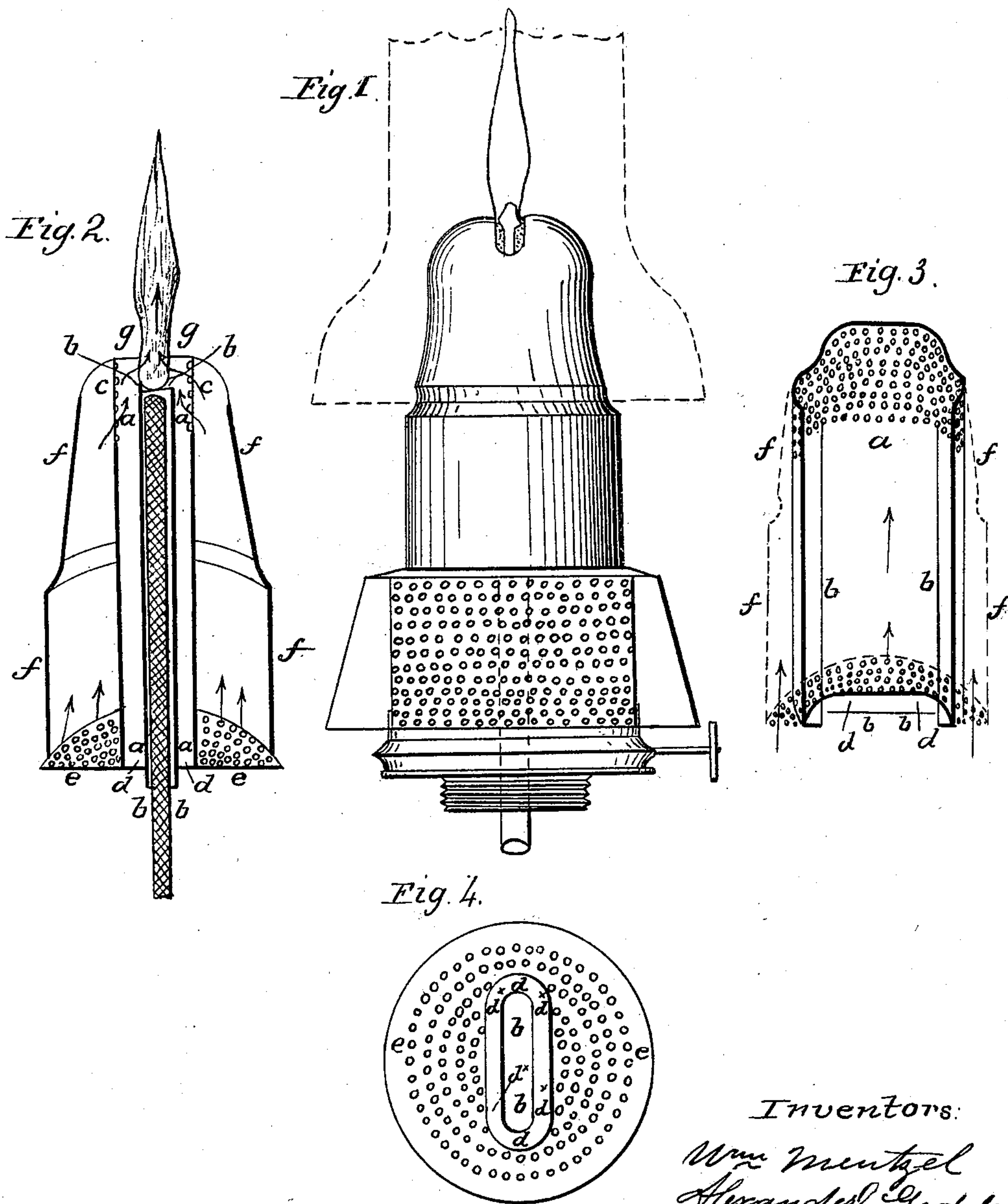


MENTZEL & GEDDES.

Lamp Burner.

No. 34,638.

Patented March 11, 1862.



Inventors:
Wm. Mentzel
Alexander Geddes
James W. Geddes

UNITED STATES PATENT OFFICE.

WILLIAM MENTZEL, ALEXANDER GEDDES, AND JAMES W. GEDDES, OF
BALTIMORE, MARYLAND.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. 34,638, dated March 11, 1862.

To all whom it may concern:

Be it known that we, WILLIAM MENTZEL, ALEXANDER GEDDES, and JAMES W. GEDDES, of Baltimore, in the State of Maryland, have invented a new Mode of Burning Coal or Carbon Oil Without the Aid of a Chimney; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The nature of our invention consists of an inside jacket-tube *a a a a*, surrounding the wick-tube *b b b b*, perforated at the top *c c* a half-inch or more down and fitting the wick-tube *b* closely at the bottom *d d* to prevent a rush of cold air coming in at that point, which jacket-tube, with the perforated bottom *e e* and outside cap *F F F F*, forms an air-chamber. The air coming in contact with the heated metal forming the chamber imparts its oxygen, and is thence thrown out through the perforations *c c* at top of jacket-tube in regular drafts at the point of combustion, thus supplying the flame with sufficient oxygen to burn coal or carbon oil completely without the aid of a chimney, and largely de-

creasing the consumption of oil, the top of cap on either side of the opening for the exit of the flame projecting, more or less, over the jacket-tube, and on one side nearly or quite over the wick for the purpose of increasing the heating-surface and spreading and steadying the flame. If necessary to be placed in a strong draft of air, or if a shade is required, a glass cup is used (inverted, as per drawing) to prevent fanning the flame, and to which a shade may be readily attached.

What we claim as our invention, and desire to secure by Letters Patent, is—

The jacket-tube *a a a a*, as described, in combination with the perforated bottom *E E*, and outside cap *F*, forming an air-chamber for regular drafts of heated air through the perforations of the jacket-tube *c c* for the supply of oxygen at the point of combustion.

WM. MENTZEL.
ALEXANDER GEDDES.
JAMES W. GEDDES.

In presence of—

H. B. STEADMAN,
WM. EMORY.