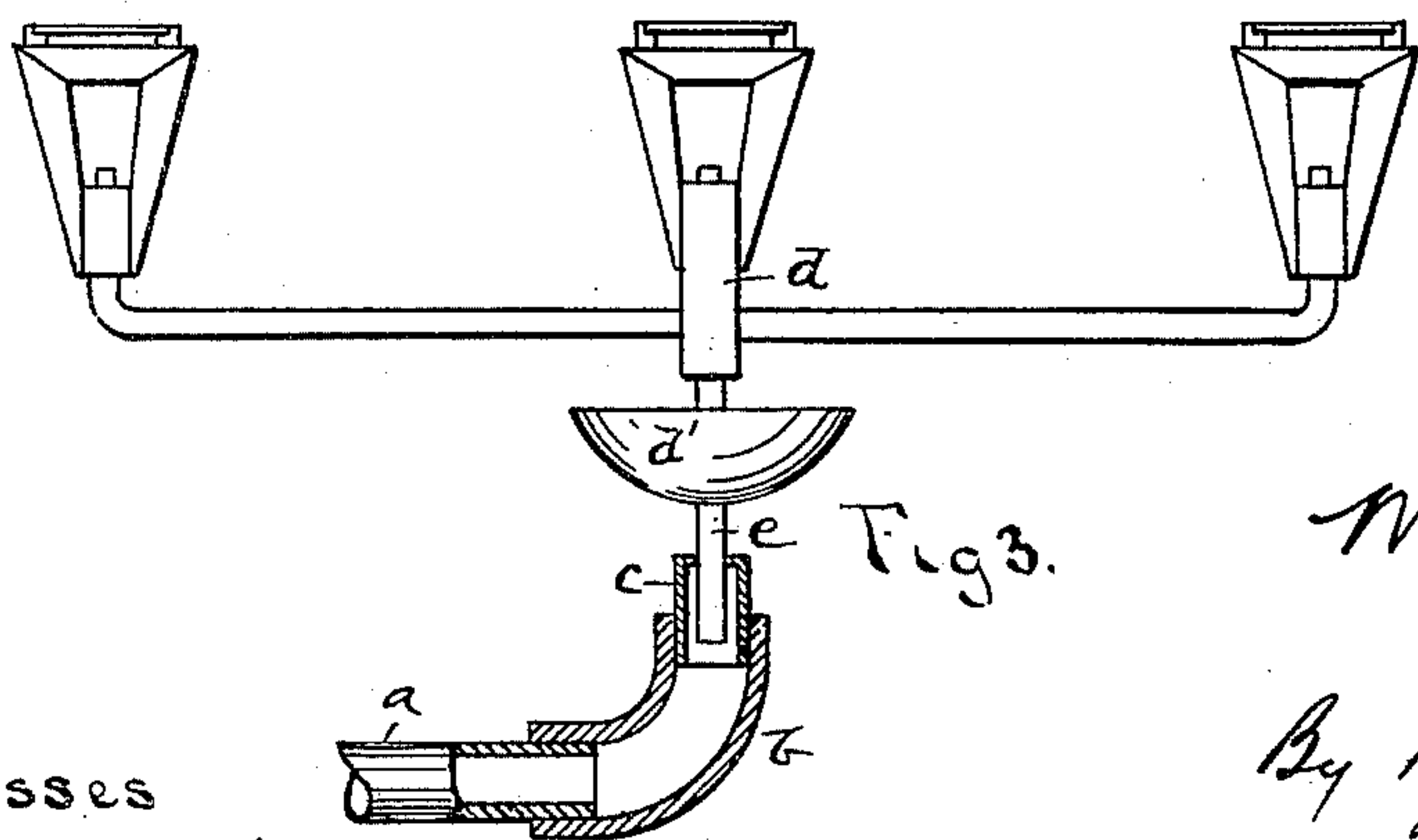
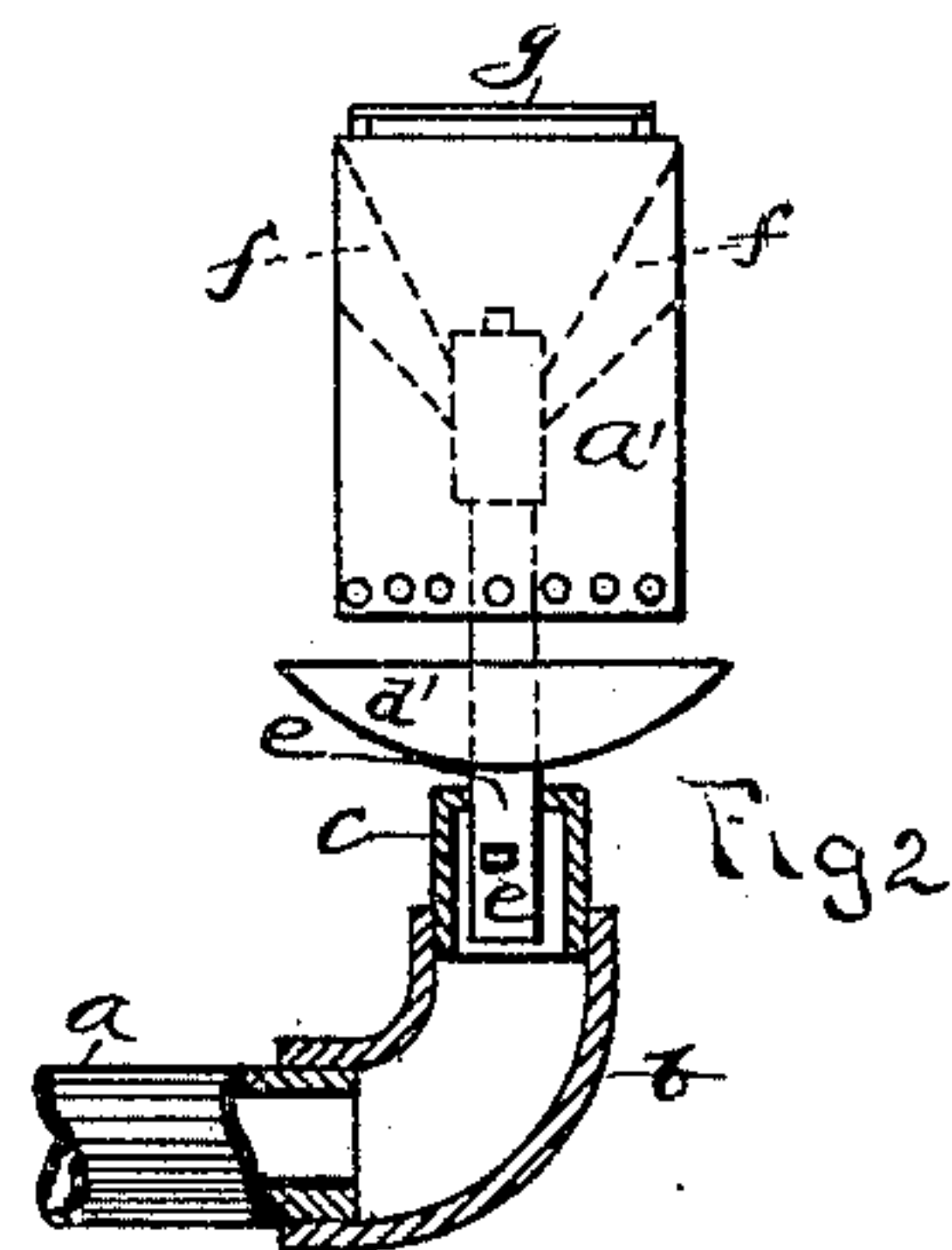
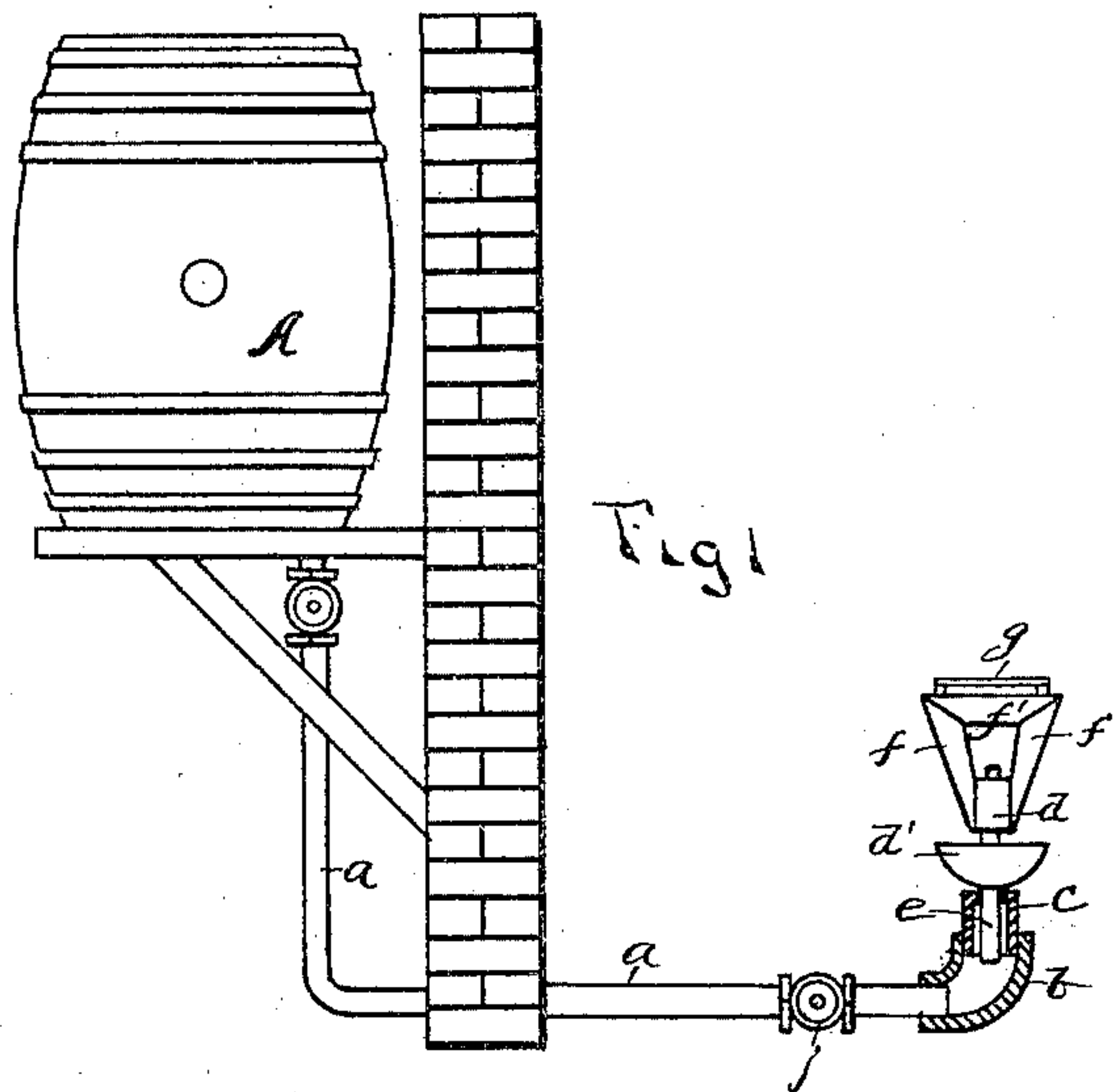


(No Model.)

W. I. OHMER.  
PETROLEUM BURNER.

No. 604,781.

Patented May 31, 1898.



Witnesses  
J. Longenecker.  
A. J. Fournier.

W. I. Ohmer,  
Inventor.  
By R. J. McCarty,  
his Attorney.

# UNITED STATES PATENT OFFICE.

WILFRED I. OHMER, OF DAYTON, OHIO.

## PETROLEUM-BURNER.

SPECIFICATION forming part of Letters Patent No. 604,781, dated May 31, 1898.

Application filed February 20, 1896. Serial No. 580,075. (No model.)

*To all whom it may concern:*

Be it known that I, WILFRED I. OHMER, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Petroleum-Burners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in petroleum-burners, as hereinafter described in the specification and set forth in the claim.

Referring to the annexed drawings, Figure 1 is an elevation of a gravity feed device, showing parts in section. Fig. 2 is a view showing a modification of the burner. Fig. 3 is a side elevation of a manifold connection of burners.

In carrying out the object and purposes of my invention I employ a reservoir A, having a suitable capacity and placed in a convenient elevated place, so as to provide a suitable fall for the oil entering the burner, which is conducted through the feed-pipe *a* into an elbow *b*. *c* designates a hood that is secured on the upper end of said elbow and through which a tube *e* projects. The hood *c* is essentially larger than the burner pipe or tube *e* in order to provide an annular space around said pipe to maintain the oil in a heated condition. The burner-tube *e* being normally hot, the oil surrounding it on the inside of the hood is likewise kept in a heated condition and quickly vaporizes. The upper end of this tube has a nipple for the emission of vapor, and the said upper end is surrounded by a collar *d*. Below this collar there is a cup *d'*, into which a sufficient quantity of oil or other ignitable liquid may be poured and ignited in giving the tube its initial heating.

*f* designates arms or brackets that converge from the collar *d* and extend upward and have upon their upper ends a heat-conducting ring *f'* with an upper concaved side. A flame-spreading plate *g* is mounted on the extreme upper ends of the said arms and provides some space between the said ring and plate for the mixture of the vapor with air, while heat is generated about the tube.

The above describes the construction of the burner hereinbefore referred to. Some modification is shown in Fig. 2, where it will be noted that the opening in the lower end of the tube *e* is in the side thereof, and the burner is inclosed above the oil-cup *d'* by a cylinder *a'*, which has its lower end open. The converging arms *f* come in contact with the interior of the cylinder and are made secure thereto, thus supporting the said cylinder. This cylinder is a means for confining the flame and heat within certain limits, and also prevents the air from blowing the flame.

Fig. 3 shows the mounting of more than one burner shown in Fig. 1, all of them being fed by gravity. The feed of the oil is controlled by a valve *j*, that may be located in any convenient position.

Having described my invention, I claim—  
In a petroleum-burner, the combination with a burner-tube, a collar surrounding said tube, arms projecting upwardly from said collar, a heat-conductor on said arms, and a flame-spreading plate above said heat-conductor, of a hood inclosing a portion of said burner-tube and providing a space around the burner-tube in which oil is heated, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

WILFRED I. OHMER.

Witnesses:

GEO. H. WOOD,  
R. J. MCCARTY.