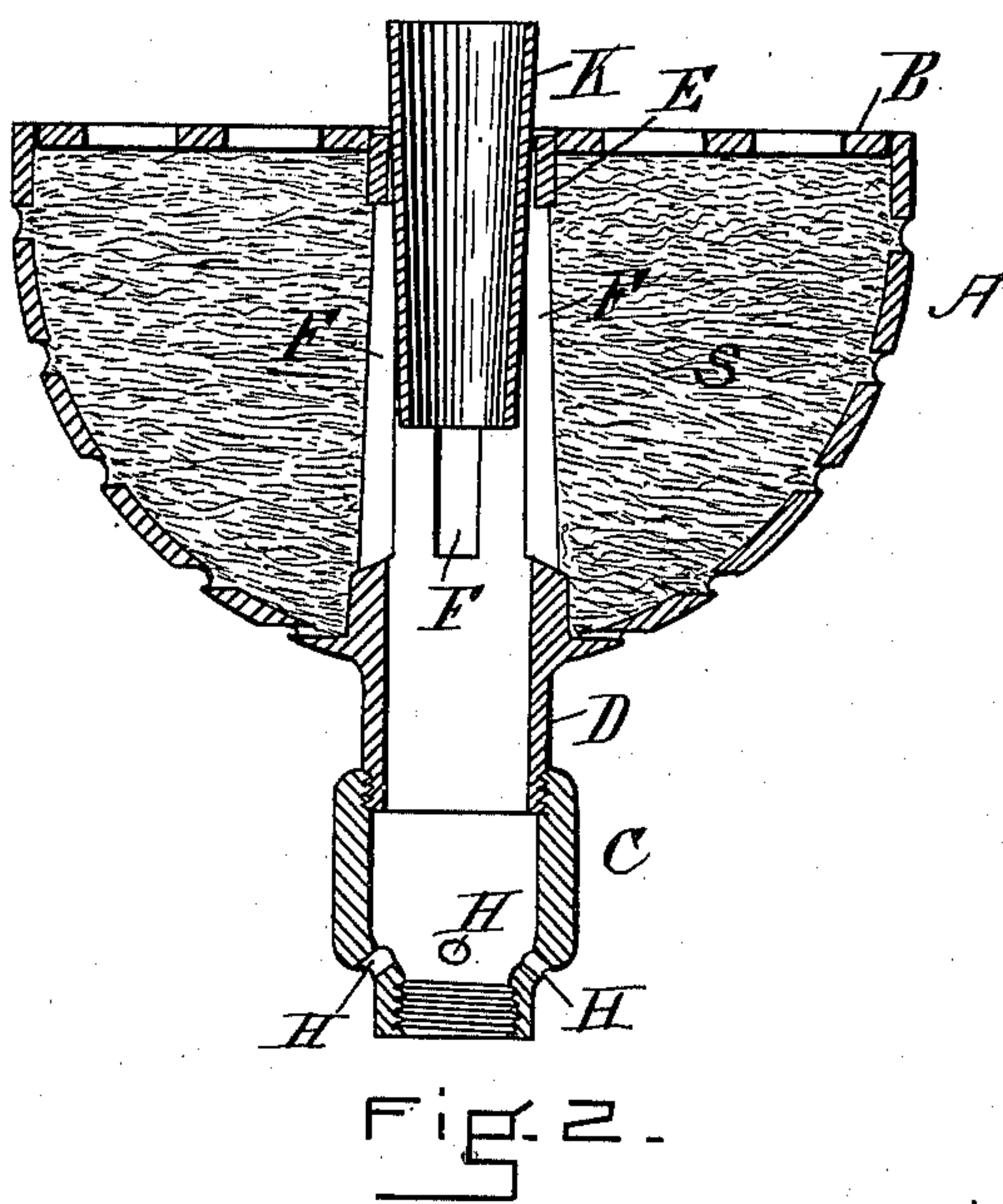
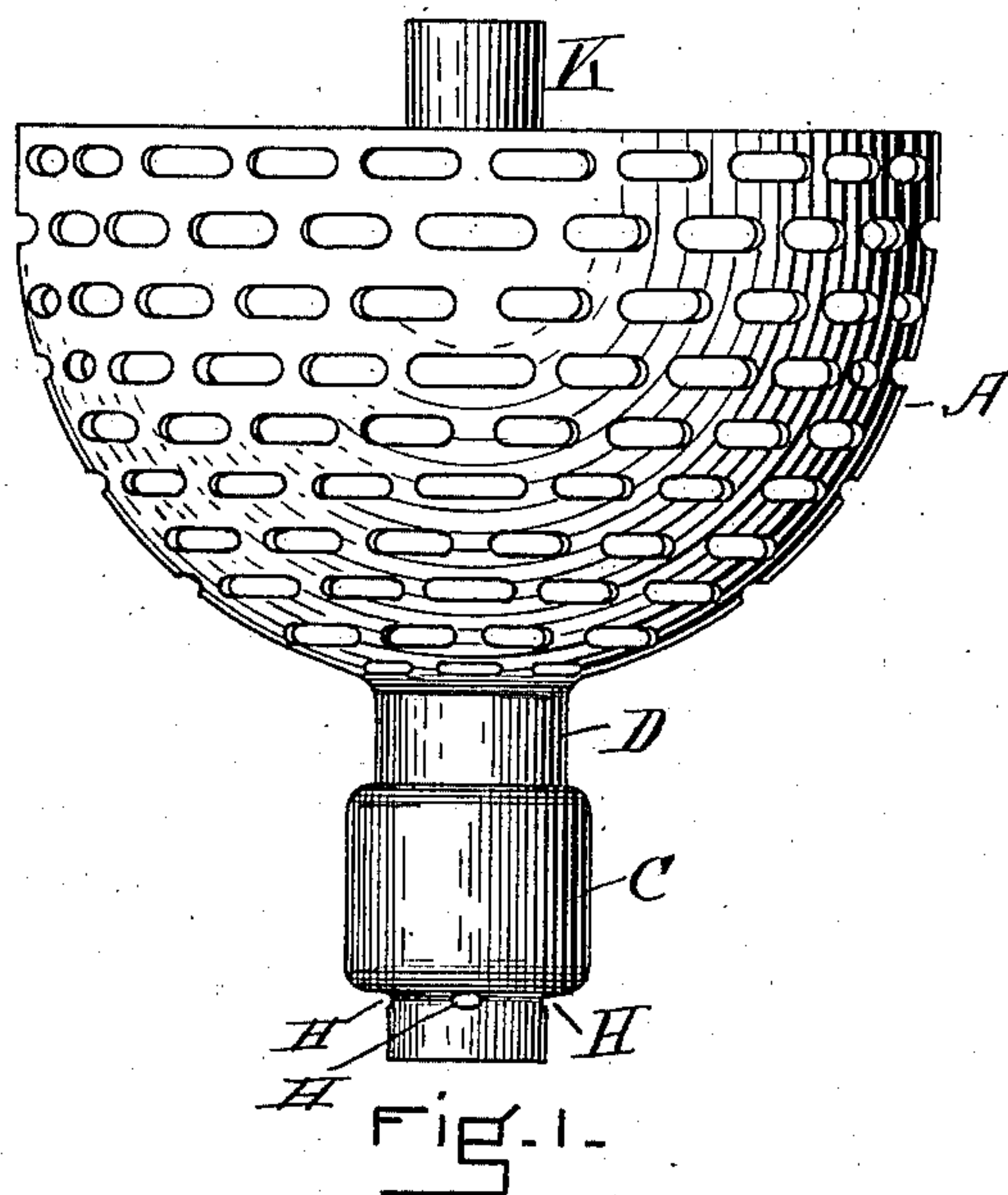


(No Model.)

J. GRAHAM  
TORCH.

No. 535,494.

Patented Mar. 12, 1895.



WITNESSES  
Frank G. Parker  
Frank G. Hattie.

INVENTOR

John Graham

# UNITED STATES PATENT OFFICE.

JOHN GRAHAM, OF BOSTON, MASSACHUSETTS.

## TORCH.

SPECIFICATION forming part of Letters Patent No. 535,494, dated March 12, 1895.

Application filed August 11, 1894. Serial No. 520,052. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN GRAHAM, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful  
5 Improvement in Torches, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to a receptacle for holding an absorbent material charged with  
10 a light-producing compound, and consists in a peculiar arrangement of parts by means of which air is introduced into the body of the material and also centrally into the field of combustion, the object being to produce a  
15 torch particularly adapted to burn highly inflammable fluids that require a free and abundant supply of air. This object I attain by means illustrated in the accompanying drawings, in which—

20 Figure 1 is an elevation showing my torch complete. Fig. 2 is a vertical section of the same.

The receptacle A is preferably made of cast metal although wire work would do equally  
25 well, or it may be of metal properly perforated and mounted. The body part of the receptacle A is supported by a hollow neck D which is adapted to be screwed into a socket piece C which may be attached to a pole, rod, or  
30 handle as may be desired. An air supply tube E extends from the neck D to the top of the receptacle A passing to the cover B which is perforated. The air supply tube E is perforated as indicated at F—F (Fig. 2) so that air  
35 is admitted to the absorbent material S with which the receptacle is filled.

The holes H—H in the socket piece C ad-

mit air to the tube E and through it to the auxiliary tube K. The object of the tube K is to take air from the supply tube E and deliver it into the center of the flame produced  
40 by the other parts of the torch.

To use my invention, the cap B is removed from the part A which is filled with some absorbent material like asbestos. This material  
45 should be packed evenly and not too solid so that air may circulate in it and become charged with the vapor arising from the fluid used and thus constitute an inflammable mixture.  
50

After the receptacle is filled, the cap B may be replaced and the constituents saturated with the fluid to be used and the torch is ready for use.

I claim—

55 In a torch, a receptacle filled with an absorbent material, saturated with a combustible fluid, and having perforated walls and top, and provided with an air tube adapted to admit air to the absorbed material, and an  
60 auxiliary tube adapted to receive air from the first tube, and vapor from the fluid held by the absorbent material and to discharge it centrally into the flame above the receptacle substantially as and for the purposes set forth.  
65

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 9th day of August, A. D. 1894.

JOHN GRAHAM.

Witnesses:

FRANK G. PARKER,  
FRANK G. HATTIE.