

(No Model.)

H. WELLINGTON.

TORCH.

No. 401,805.

Patented Apr. 23, 1889.

FIG. 1.

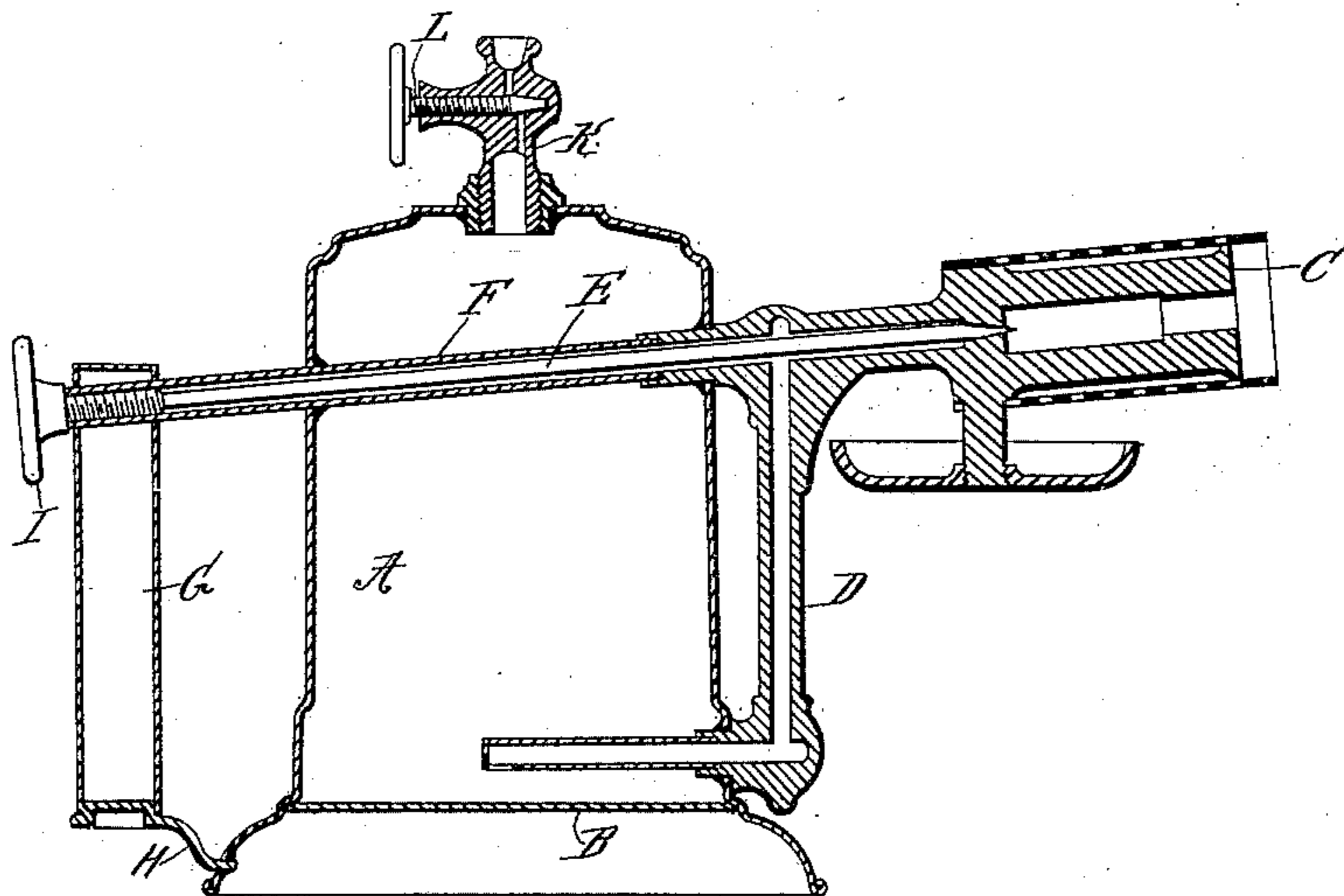


FIG. 2.

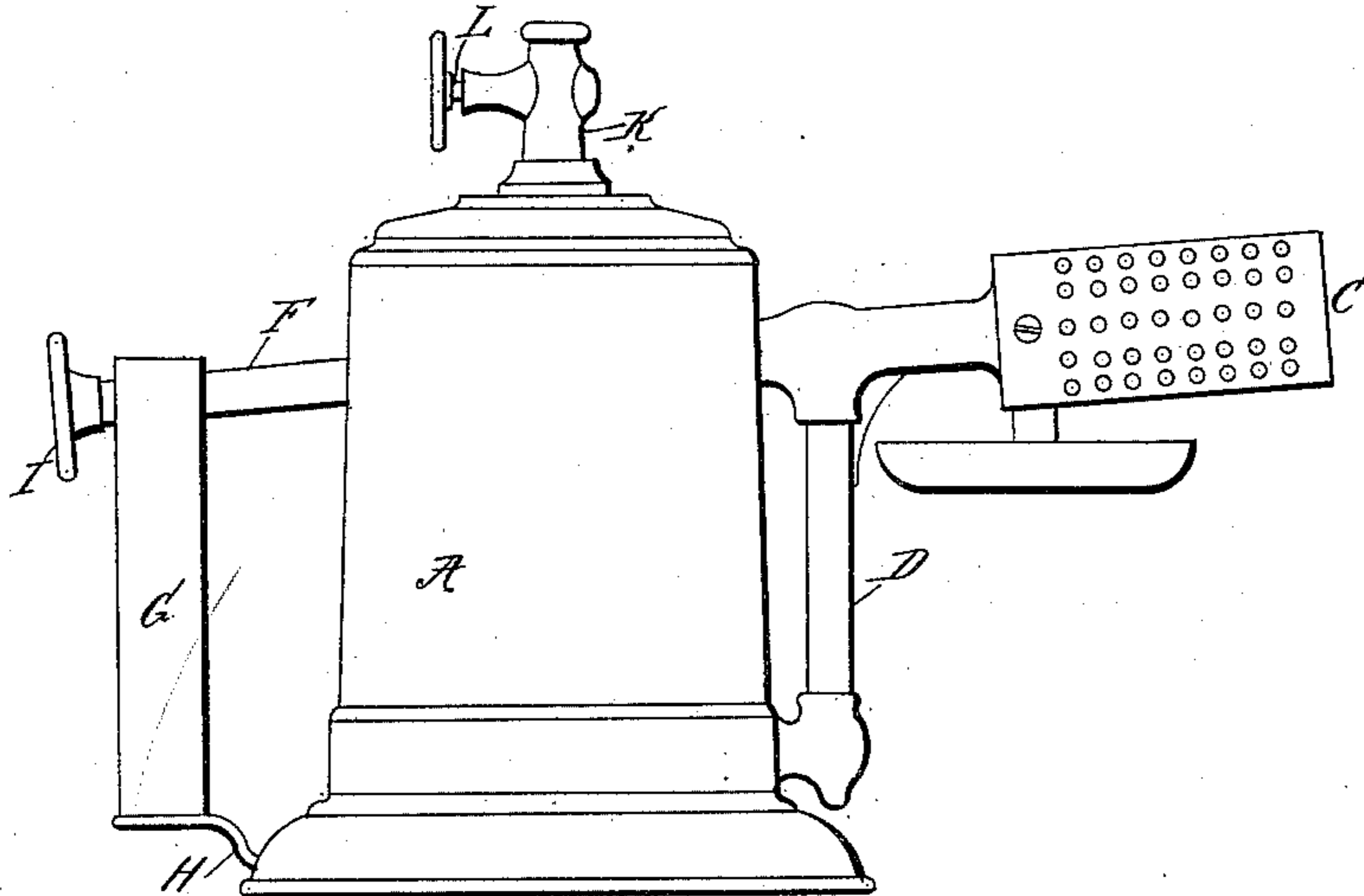
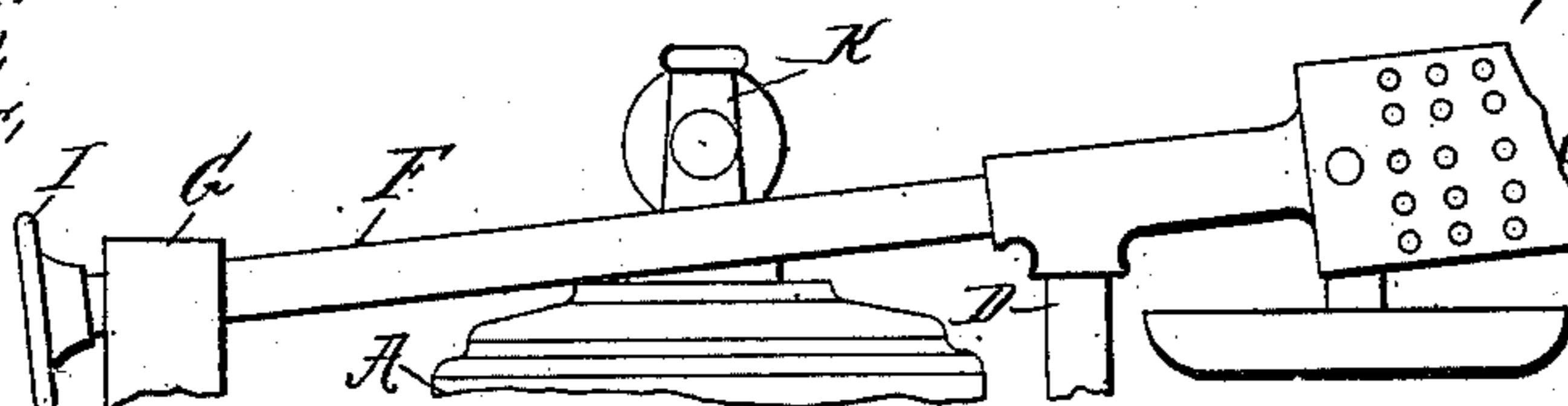


FIG. 3.

Witnesses:  
John Buckle,  
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# UNITED STATES PATENT OFFICE.

HENRY WELLINGTON, OF BROOKLYN, NEW YORK.

## TORCH.

SPECIFICATION forming part of Letters Patent No. 401,805, dated April 23, 1889.

Application filed May 1, 1888. Serial No. 272,416. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY WELLINGTON, of Brooklyn, county of Kings, and State of New York, have invented certain new and  
5 useful Improvements in Torches, of which the following is a full clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

10 My invention relates to torches, such as are employed by painters, plumbers, lamp-lighters, and others, for various heating and burning purposes, and intended to be carried in the hand, and particularly to that kind some-  
15 times called "vapor-burning" torches, employing naphtha or other light hydrocarbon or easily-vaporizing material.

The object of my invention is to produce a torch of the class named, which shall be  
20 light, compact, durable, efficient, composed of few and simple parts, so that it may be easily and cheaply made, and so arranged that danger of leakage will be obviated.

To accomplish all of this, my improvements  
25 involve certain new and useful peculiarities of construction and relative arrangements or combinations of parts, as will be herein first fully described, and then pointed out in the claims.

30 In the accompanying drawings, forming part of this specification, Figure 1 is a vertical section, and Fig. 2 a side elevation, of my improved torch complete, showing the needle-valve and casing passing through the  
35 shell of the torch, near the top thereof; and Fig. 3 is an elevation of a fragment, showing the needle-valve and casing located outside but above the shell.

In all the figures like letters of reference,  
40 wherever they occur, indicate corresponding parts.

A is the shell of the torch which receives the liquid fuel. This shell is drawn up or spun in one piece, except the bottom B, which  
45 is secured in place by solder after the other parts are located.

C is the burner, of any approved form calculated to convert the liquid fuel into vapor before it issues at the gas-jet orifice. The  
50 burner is shown as cast with the conducting-tube D; but of course it might be otherwise

formed. The conducting-tube D communicates with the lowermost part of the shell or oil-chamber, so as to drain the same well and so that it will receive oil under all ordinary  
55 positions of the torch.

E is the needle-valve which controls the gas-jet orifice in the burner. The stem of this valve is provided with a casing, F, which surrounds it for its entire length, and the  
60 valve and its casing are located above the usual highest level of the oil in the oil-chamber. This is important to prevent leakage. Under the form shown in Fig. 1 the casing connects with the burner and passes through  
65 the oil-chamber; but the same security against leakage is attained in the form shown in Fig. 3, wherein the valve and its casing are located outside the oil-chamber and above it. G is the handle secured at bottom by a bracket, H,  
70 and at top by the casing, F, which passes through it. The outer end of the casing is threaded to receive the threaded end of the valve-spindle, the spindle being turned by a thumb-wheel, I. This wheel is preferably so  
75 located that when the valve is closed it will close the end of the casing; but this is not essential. The shell is charged by removing the plug K. In this plug is a valve, L, which closes a perforation through it. The top of  
80 the plug constitutes a mouth-piece, to which the lips are applied and air forced in sufficient to create the desired pressure, when the valve L is closed and the torch ready to be lighted and burned, after the manner of using  
85 such torches.

The torch constructed and arranged substantially in accordance with the foregoing explanations has been found in practice to admirably answer the purpose or object of  
90 the invention as previously set forth.

Having now fully described my invention, what I claim as new herein, and desire to secure by Letters Patent, is—

1. In a torch of the character herein set  
95 forth, the valve-stem and its casing located above the usual oil-level, extending across but not communicating with the oil-chamber, and the handle of the torch connected with the valve-stem casing and with the base of  
100 the torch, substantially as and for the purposes set forth.

2. In a torch of the character herein set forth, the combination, with the shell provided with an air-valve, of the valve-stem casing extending through the top of the oil-chamber, but not communicating with the interior thereof, and being above the usual oil-level, said casing being threaded upon its outer end to receive the threaded valve-stem, and the burner connected with the valve-stem

casing, arranged substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

HENRY WELLINGTON.

Witnesses:

JOHN BUCKLER,  
WORTH OSGOOD.