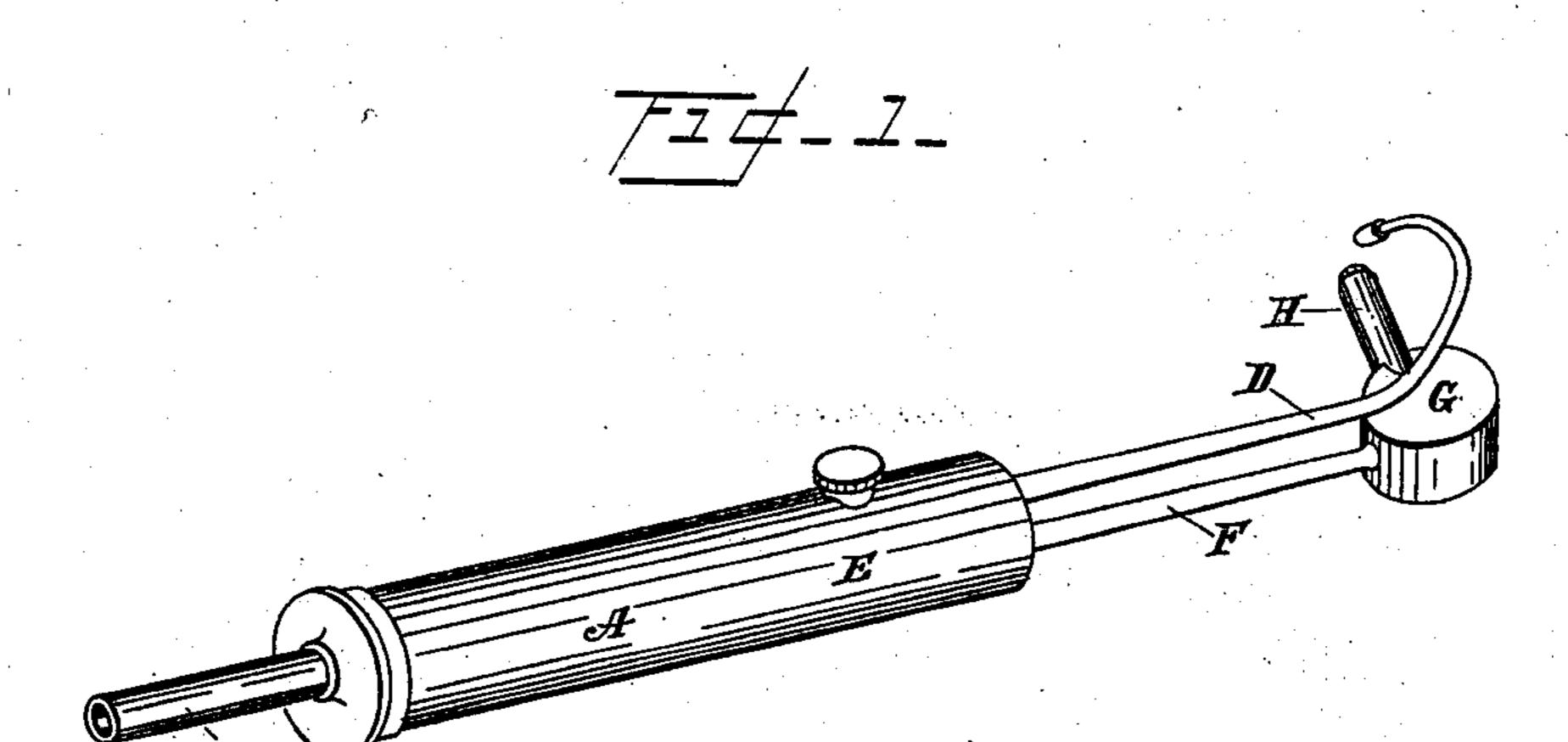
No. 692,752.

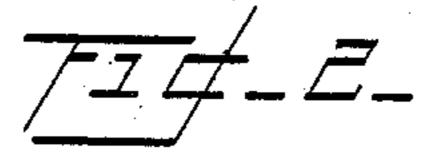
Patented Feb. 4, 1902.

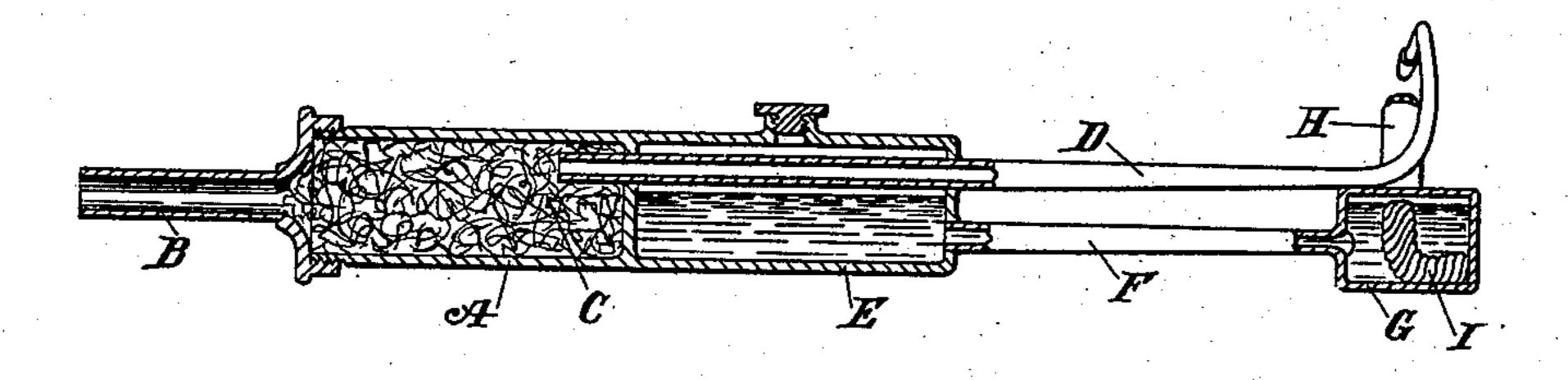
## C. G. WOODMANSEE. BLOWPIPE TORCH.

(Application filed Nov. 11, 1901.)

(No Model.)







WITNESSES
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## United States Patent Office.

CLAY G. WOODMANSEE, OF LOS ANGELES, CALIFORNIA, ASSIGNOR OF ONE-HALF TO R. C. HAMLIN, OF LOS ANGELES, CALIFORNIA.

## BLOWPIPE-TORCH.

SPECIFICATION forming part of Letters Patent No. 692,752, dâtêd Februâry 4, 1902.

Application filed November 11, 1901. Serial No. 81,933. (No model.)

To all whom it may concern:

Be it known that I, CLAY G. WOODMANSEE, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles. State of California, have invented new and useful Improvements in Blowpipe-Torches, of which

the following is a specification.

My invention is designed, primarily, for the use of jewelers; and it consists of a combined vapor-generating chamber and a blowpipe and torch; and the objects thereof are to provide a convenient tool for the use of jewelers and others who require a small torch and in which an inexpensive fluid may be used for producing the required heat and in which a more steady flame can be maintained with less exertion than in the use of the ordinary blowpipe and torch. I accomplish these objects by the blowpipe-torch described herein and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my blow-pipe-torch. Fig. 2 is a longitudinal vertical

section of the same.

In the drawings, A is the casing of the vapor-generating chamber, on the rear end of which is removably attached the mouth or air-tube B, through which air is forced into the chamber. This chamber is filled with 30 waste or other fibrous material C, which is saturated with gasolene or other volatile inflammable fluid. Affixed to the front end of the chamber and projecting a short distance therein is blowpipe D, which also passes 35 through the alcohol-reservoir E, which is preferably attached to the front of the vaporchamber. The alcohol-reservoir is connected by tube F with lamp G, having wick-tube H for the reception of the wick I, which wick-40 tube terminates a little below the end of the blowpipe, so that a very small flame will ignite the vapor as it passes out of the blowpipe.

In the foregoing description and in the drawings I have described and illustrated the form of blowpipe-torch that I prefer, as I have found by experiment that this is the preferred form; but other arrangements of the several

parts may be made without departing from the spirit of my invention, which consists of a vapor-generating chamber, into which the air is forced and in which it contacts with a volatile inflammable fluid to produce a vapor, which vapor is discharged through a blowpipe connected to and opening into the vapor-chamber, and a torch or lamp rigidly attached to the vapor-chamber or to the blowpipe in such position that a small flame produced thereby will constantly ignite the vapor issuing from the blowpipe.

In the operation of my device the operator lights the lamp, then places the mouthpiece in his mouth, and blows into the vapor-generating chamber. As the air contacts with the gasolene in the waste an inflammable vapor is produced. This vapor is forced out through the blowpipe, where it contacts with the flame of the lamp, which causes its ignition, and the flame produced from the vapor can be utilized in the production of heat in 70 the usual manner, thereby utilizing a cheaper fluid than can be used with the ordinary blowpipe and lamp. A bellows attachment might be provided to supply the air into the vapor-chamber.

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

Patent, is—

The herein-described vapor-generating chamber A, having waste C therein; air-pas-80 sage B connected to the rear end, and blow-pipe-tube D connected to the front of said chamber; reservoir E attached to the front end of the generating-chamber; tube F connecting said reservoir with lamp G; lamp G, 85 having burner-tube H terminating below the end of the blowpipe-tube; and wick I in said lamp.

In witness that I claim the foregoing I have hereunto subscribed my name this 5th day of 90

November, 1901.

CLAY G. WOODMANSEE.

Witnesses:

G. E. HARPHAM,
MATTIE McGINNIS.