(No Model.)

A. D. BARRETT.

BLOW PIPE.

No. 570,656. Patented Nov. 3, 1896.

Fig. 1.

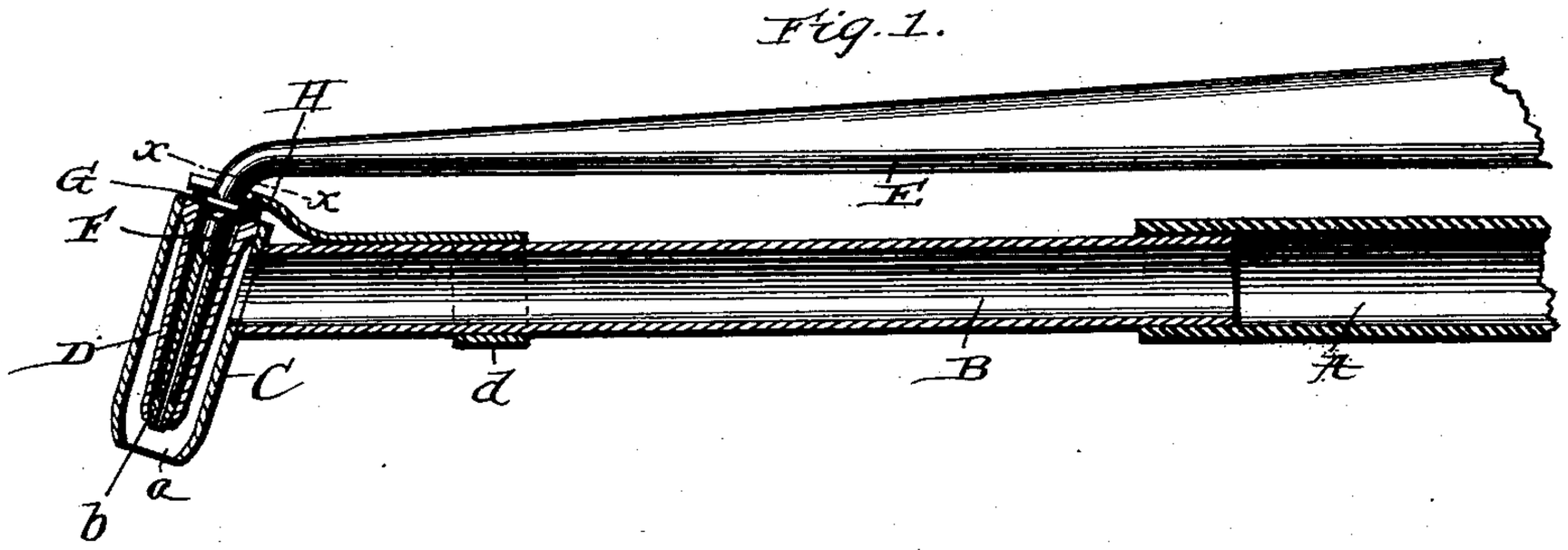
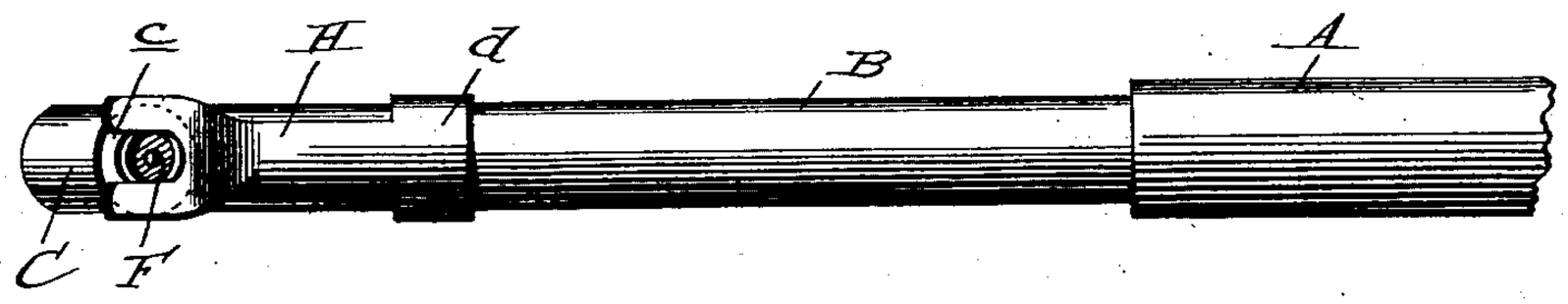


Fig. 2.



Witnesses:
C. H. Pauder
H. A. James

Inventor
A. D. Barrett
By James J. Shechy
Attorney

UNITED STATES PATENT OFFICE.

ADDISON D. BARRETT, OF NORFOLK, VIRGINIA.

BLOWPIPE.

SPECIFICATION forming part of Letters Patent No. 570,656, dated November 3, 1896.

Application filed September 9, 1896. Serial No. 605,342. (No model.)

To all whom it may concern:

Be it known that I, ADDISON D. BARRETT, a citizen of the United States, residing at Norfolk, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Blowpipes; 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.

My invention relates to improvements in devices for forcing a jet of flame against articles to expedite the heating of the same; and its novelty and advantages will be fully understood from the following description and claims when taken in conjunction with the annexed drawings, in which—

Figure 1 is a longitudinal section of my improved device with a portion in elevation, and Fig. 2 is a section taken in the plane indicated by the line *x x* of Fig. 1.

Referring by letter to the said drawings, A indicates a tube, of rubber or other compressible material, which is designed to be suitably connected to a source of gas supply.

B indicates a metallic tube which is connected in a gas-tight manner to the tube A, and C indicates a nozzle which is brazed on or otherwise suitably connected to the forward end of the tube B and is disposed at about the angle shown to the same, and has its lower end contracted, as indicated by *a*, for a purpose presently to be described. This nozzle C receives the socket-sleeve D, which is brazed on or otherwise suitably connected to it at its upper end and extends to a point adjacent to its contracted end *a*, as shown.

E indicates the blowpipe of my improved device. This pipe E is preferably tapered or gradually reduced in diameter toward its forward end, as shown, and it is provided at such end with the angularly-disposed nozzle F, which is reduced in diameter or tapered to-toward its discharge end to conform to the socket-sleeve, in which it is inserted, and is provided at such discharge end with the enlargement *b*, designed to fit snugly in the socket-sleeve and thereby prevent the escape of air between the nozzle and said socket-sleeve.

At about the point shown upon its nozzle F the blowpipe E is provided with the collar G. This collar G bears upon the upper end of the socket-sleeve and is designed for the engagement of the keeper H, the purpose of which is to retain the nozzle of the blowpipe in the socket-sleeve.

The keeper H is bifurcated at one end, as indicated by *c*, so as to enable it to straddle the blowpipe above the collar G for the purpose stated, and it is provided at its opposite end with the collar *d*, which loosely surrounds the tube B and serves to connect it thereto. In virtue of this construction it will be observed that the keeper may be readily moved into engagement with the blowpipe, so as to secure the nozzle thereof in the socket-sleeve D, and may as readily be moved out of engagement with the blowpipe to permit of the removal of the same from the socket-sleeve.

In practice the compressible tube A is connected with a source of gas supply, (not illustrated,) and the blowpipe E is connected with a suitable bellows or the like, (also not illustrated,) or said blowpipe may be adapted for the application of the operator's mouth at one end. When it is desired to use the device, the gas is turned on and is ignited at the discharge end of the nozzle C. The operator then grasps the tube B with one hand and the compressible tube A with the other and holds the discharge end of the nozzle C at the desired distance from the article to be heated. By compressing the tube A, more or less, with his thumb and fingers the operator is enabled to provide a small or large jet of flame, as desired, and is also enabled to effect a material saving of gas, which is a material advantage.

The manner described of connecting the blowpipe to the tube B permits of the said blowpipe swinging freely, so as not to interfere with the movements of the tube A and tube B in the hands of the operator.

The socket-sleeve D is not essential to my improved device, and when desired it may be omitted, in which the collar G of the blowpipe will be made to rest on the upper end of the nozzle C.

Having described my invention, what I claim is—

1. The device described for forcing a jet of flame against articles to be heated comprising a tube, a nozzle C, secured upon one end of the tube and disposed at an angle thereto and

having its opposite ends open, a blowpipe having a nozzle inserted in the nozzle C, and also having a collar-flange, and a keeper bifurcated at one end so as to straddle the blowpipe above its collar-flange and having a collar at its opposite end loosely mounted on the tube, substantially as specified.

2. The device described for forcing a jet of flame against articles to be heated comprising a compressible tube, a metallic tube connected therewith, a nozzle C, secured upon one end of the metallic tube and disposed at an angle thereto and having its opposite ends open, a socket-sleeve arranged in said nozzle and connected thereto, a blowpipe having a nozzle inserted in the socket-sleeve and also having a collar-flange, and a keeper bifurcated at one end so as to straddle the blowpipe above its collar-flange and having a collar at its opposite end loosely mounted on the metallic tube, substantially as specified.

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

ADDISON D. BARRETT.

Witnesses:
CORA V. GRIFFIN,
H. E. DUPUY.