

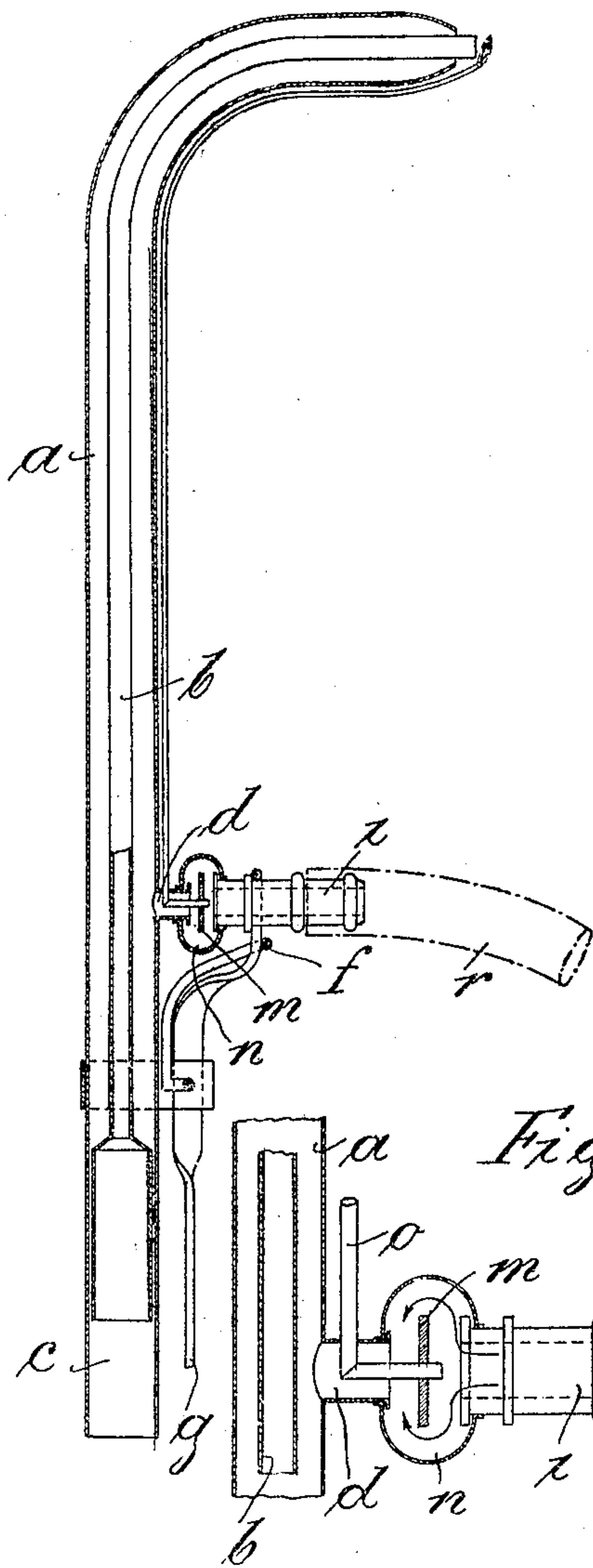
No. 797,933.

PATENTED AUG. 22, 1905.

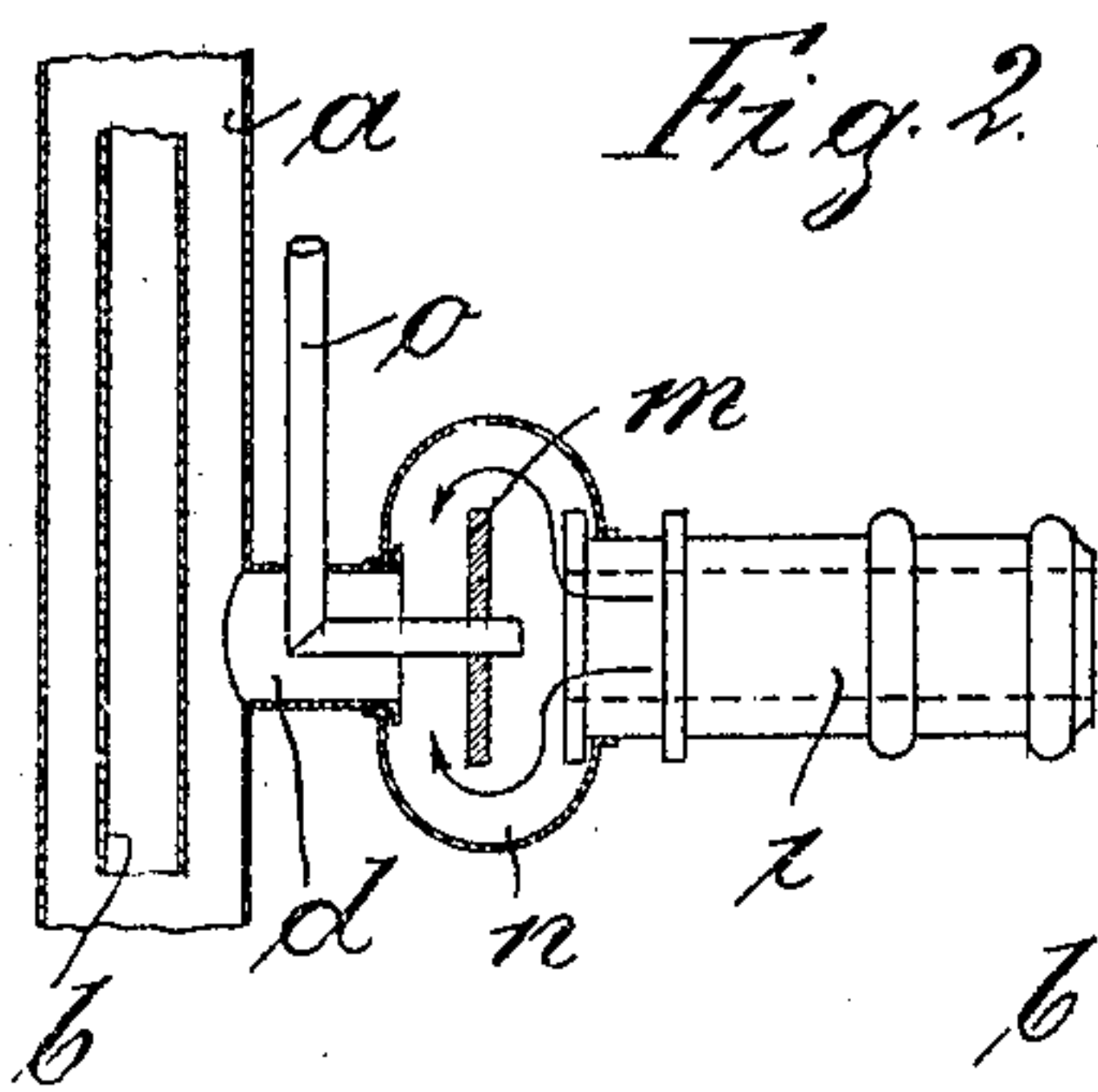
C. BAUER.  
BLOWPIPE.

APPLICATION FILED APR. 20, 1903.

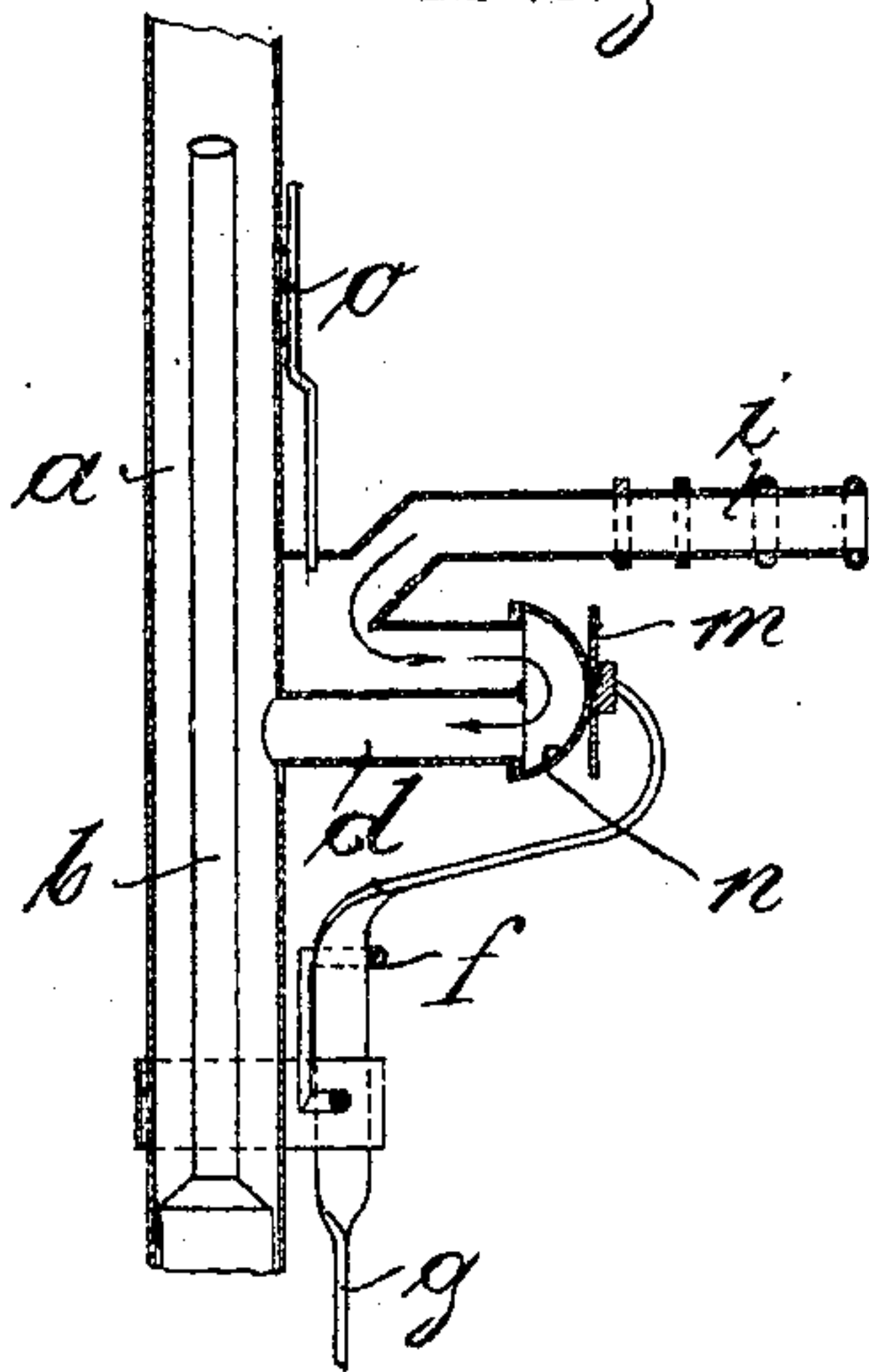
*Fig. 1.*



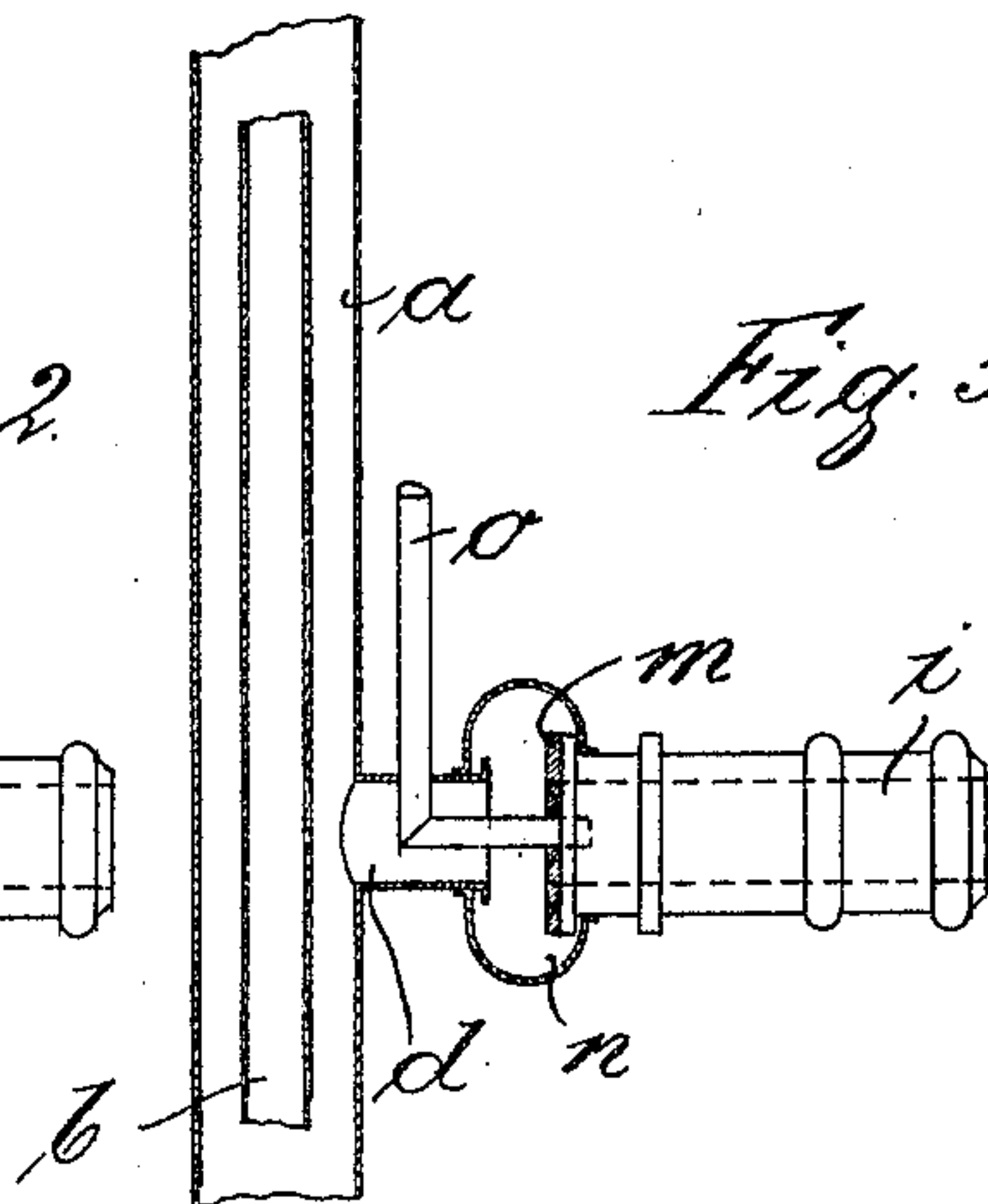
*Fig. 2.*



*Fig. 4.*



*Fig. 3.*



*Witnesses*  
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# UNITED STATES PATENT OFFICE.

CHRISTIAN BAUER, OF PFORZHEIM, GERMANY.

## BLOWPIPE.

No. 797,933.

Specification of Letters Patent.

Patented Aug. 22, 1905.

Application filed April 20, 1903. Serial No. 153,558.

*To all whom it may concern:*

Be it known that I, CHRISTIAN BAUER, a subject of the Grand Duke of Baden, and a resident of 2 Schwarzwaldstrasse, Pforzheim, in the Grand Duchy of Baden, German Empire, have invented new and useful Improvements in Blowpipes, of which the following is an exact specification.

My invention relates to improvements in blowpipes, and has for its purpose to provide means for easily opening the gas-admission valve for the blowpipe-flame and for automatically closing this valve after using the blowpipe.

In order to make my invention more clear, I refer to the accompanying drawings, in which—

Figure 1 is a longitudinal section of a blowpipe provided with the new arrangement. Fig. 2 is a detail of the same in an enlarged scale. Fig. 3 shows the parts illustrated in Fig. 2 in another position of the same. Fig. 4 is a modification of the construction shown in Figs. 1 to 3.

In the drawings, *a* is a gas-pipe. *b* is the blowpipe proper situated within the same.

*c* is a mouthpiece fixed to the blowpipe. As will be seen from the drawings, the end of the blowpipe is enlarged, so as to fit tightly into the gas-pipe. To the gas-pipe *a* a small pipe *d* is fixed, which is connected, by means of an elastic ring or the like *n*, to a small pipe *i*, connected, by means of a rubber tube *r*, to a gas-pipe or gas-reservoir. Within the elastic ring *n* a plate *m* is situated, which plate serves for closing the pipe *i* by pushing this pipe against the plate. The construction of the elastic ring *n* must be such as to allow the movement of the pipe *i* and to offer a sufficient space for the passage of the gas.

The pipe *i* is moved by means of a lever *g*, influenced by a spring *f*, which tends to hold the pipe *i* in the position shown in Fig. 3—that is to say, in the position in which the pipe *i* is closed by means of the plate *m*. By pressing upon the free end of the lever *g*, which pressing can be effected by means of the finger or by means of the lips, the pipe *i* is brought into the position shown in Fig. 2, in which position the gas can flow around the plate *m* to the pipe *a*, as shown by the arrows, Fig. 2.

In the modification shown in Fig. 4 the pipe *i* is rigidly connected to the pipe *a* and the plate *m* is connected to the lever *g*, so that the opening and closing of the pipe *d*, by means of which the pipe *i* is connected to the pipe *a*, is effected by moving the plate *m*. Instead of the annular elastic part *n* a cup-formed elastic part is provided, which in its normal position is pressed, by means of the plate *m*, upon the pipe *d*, thereby effecting a tight closing of the same.

In both constructions described a small pipe *o* may be provided, which leads from the pipe *i* to the burner-mouth of the blowpipe. This pipe *o* serves the purpose of leading a small quantity of gas to a constantly-burning ignition-flame.

Having thus fully described the nature of this invention, what I desire to secure by Letters Patent of the United States is—

1. In a blowpipe, the combination of the blast-pipe, and a gas-pipe surrounding this blast-pipe, with a branch pipe for connecting the gas-pipe to a gas-reservoir, this branch pipe consisting of two parts connected to each other by an elastic union, a valve at this elastic union opposite the branch-pipe openings, and means for altering by the intermediation of the elastic union the relative position of said valve and the branch-pipe opening, thereby opening and closing the branch pipe, substantially as described and for the purpose set forth.

2. In a blowpipe, the combination of the blast-pipe, and a gas-pipe surrounding this blast-pipe, with a branch pipe for connecting the gas-pipe to a gas-reservoir, this branch pipe consisting of two parts connected to each other by an elastic union, a fixed plate within the elastic union opposite to the branch-pipe opening, means for longitudinally moving the one part of the branch pipe with regard to said plate, so that the branch pipe is opened or closed by said plate, substantially as described and for the purpose set forth.

3. In a blowpipe, the combination of the blast-pipe, and a gas-pipe surrounding this blast-pipe, with a branch pipe for connecting the gas-pipe to a gas-reservoir, this branch pipe consisting of two parts connected to each other by a cap-like union, a plate outside said



union and opposite to the branch-pipe openings connected to each other by said union, means for moving said plate longitudinally to the branch pipe, thereby opening or closing the branch pipe by releasing or compressing the elastic union, substantially as described and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHRISTIAN BAUER.

Witnesses:

GUSTAV SCHWEISS,  
M. L. BRITTAIN.