No. 743,313. PATENTED NOV. 3, 1903.

W. H. MURPHY.

OXYHYDROGEN BLOWPIPE.

APPLICATION FILED SEPT. 3, 1903.

NO MODEL.

Fig. 1.

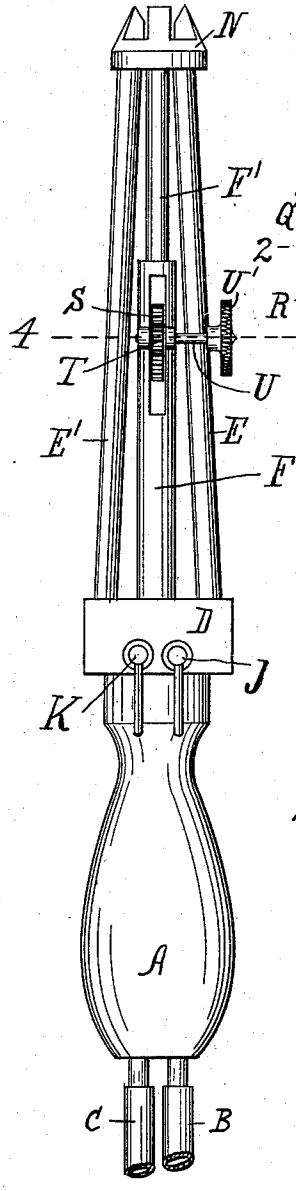


Fig. 3.

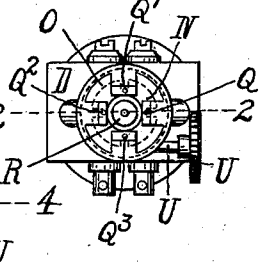


Fig. 4.

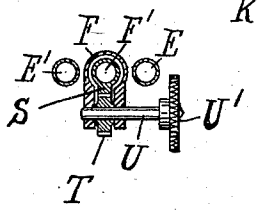
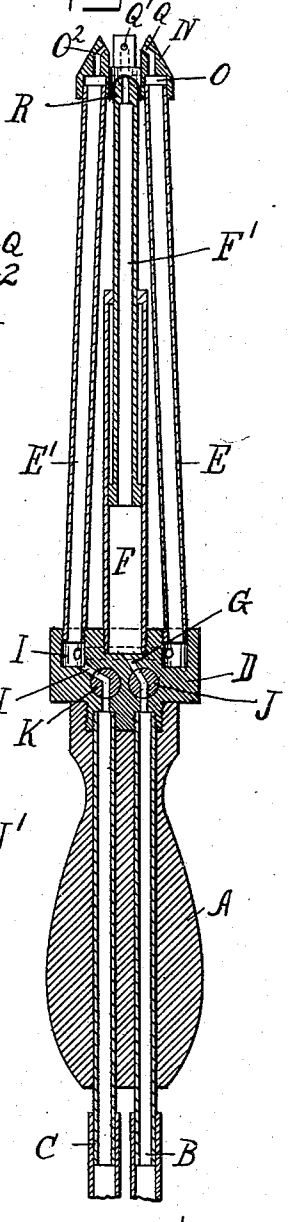


Fig. 2.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 743,313. Patented November 3, 1903.

UNITED STATES PATENT OFFICE.

WILLIAM HUNT MURPHY, OF ROCHESTER, NEW YORK.

OXYHYDROGEN-BLOWPIPE.

SPECIFICATION forming part of Letters Patent No. 743,313, dated November 3, 1903.

Application filed September 3, 1903. Serial No. 171,800. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HUNT MURPHY, a citizen of the United States, and a resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Oxyhydrogen-Blowpipes, of which the following is a specification.

This invention relates to oxyhydrogen-blowpipes, and has for its object to produce a blowpipe of high efficiency that can be cheaply made and easily handled.

In the drawings, Figure 1 represents a side elevation of the burner. Fig. 2 is a vertical section on the line 2 2 of Fig. 3; Fig. 3, a top view, and Fig. 4 a horizontal section on the line 4 4 of Fig. 1.

The base A, which may be formed into a handle, as represented, has two tubes B and C extending through it. The tube B is for oxygen, and the tube C is for hydrogen. A block D is attached to the base A, and that in turn supports the hydrogen-tubes E E′ and the centrally-located two-part oxygen-tube F F′. The oxygen-tube F is connected with the oxygen-tube B by the channel G through the block D. The hydrogen-tubes E E′ are connected with the hydrogen-tube C by the channel H and the chamber I in the block D. Cocks J and K, manipulated by handles L and M, respectively, are adapted to regulate the admission of hydrogen and oxygen to the tubes E and E′, respectively.

A cap N is shown upon the upper ends of the hydrogen-tubes E and E′, which has an annular chamber O, into which said tubes E and E′ open. The cap N has four nozzles Q, Q′, Q^2, and Q^3, which so direct the hydrogen-jets that are blown from them that they are concentrated at a single point.

A tip R is secured upon the end of the upper section F′ of the oxygen-tube, that has a central orifice for the discharge of oxygen. The height of the oxygen-tube is adjusted by extending or retracting its upper section F′, as by the ratchet and pinion shown in Figs. 1 and 4.

S is the ratchet, which is represented upon the upper section F′, and T is the pinion upon the stem U, having the milled head U′.

The operation is as follows: The hydrogen is turned on and lighted. Then the oxygen is turned on, and the tip R is moved until the proper combination of oxygen and hydrogen is effected.

What I claim is—

1. In an oxyhydrogen-blowpipe the combination of a plurality of hydrogen-tubes, so arranged with reference to each other as to concentrate the discharges therefrom at a single point, with an oxygen-tube adapted to discharge oxygen into the hydrogen discharged from said hydrogen-tubes; and means for extending and retracting said oxygen-tube; substantially as shown and described.

2. In an oxyhydrogen-blowpipe the combination of a plurality of hydrogen-tubes, so arranged with reference to each other as to concentrate the discharges therefrom at a single point, with an oxygen-tube adapted to discharge oxygen into the hydrogen discharged from said hydrogen-tubes; means for extending and retracting said oxygen-tube; and means for regulating the admission of hydrogen and oxygen to said tubes respectively.

WILLIAM HUNT MURPHY.

Witnesses:
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D. GURNEE.