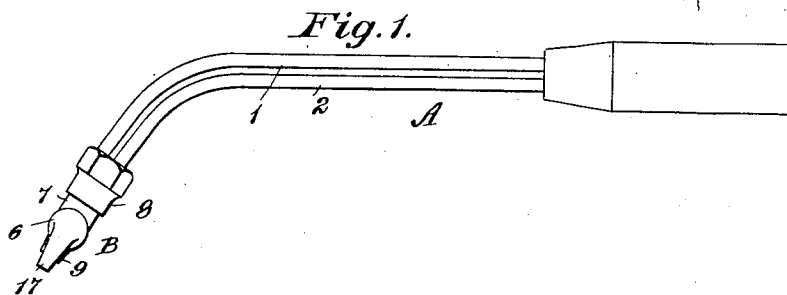
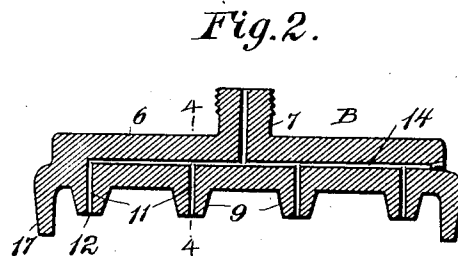
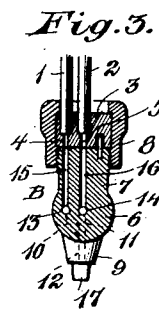
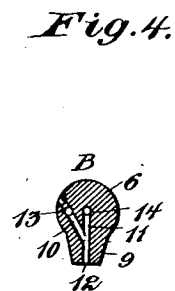


A. F. JENKINS.
NOZZLE FOR OXYACETYLENE TORCHES.
APPLICATION FILED MAY 18, 1918.

1,371,309.

Patented Mar. 15, 1921.



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NOZZLE FOR OXYACETYLENE-TORCHES.

1,371,309.

Specification of Letters Patent.

Patented Mar. 15, 1921.

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To all whom it may concern:

Be it known that I, ALEXANDER F. JENKINS, a citizen of the United States, and resident of Baltimore, State of Maryland, have invented certain new and useful Improvements in Nozzles for Oxyacetylene-Torches, of which the following is a specification.

This invention relates to a nozzle for oxyacetylene torches and other blow pipes, and it has for its principal object to provide a nozzle especially adapted for preheating the work in a simple, reliable and efficient manner by the use of a plurality of jet orifices, whereby a multiplicity of flames simultaneously play upon the work, the nozzle being so constructed that the acetylene gas and oxygen or equivalent combustible fluids are mixed in the nozzle, and on the latter are means for preventing the nozzle from being brought into such close proximity to the work as to cause the flames to become extinguished and to prevent backfiring.

A more specific object of the invention is the provision of a nozzle having a plurality of flame orifices and lugs projecting in the direction of the flame, whereby the lugs by coming into contact with the work will maintain the jet orifices the proper distance from the latter, so as to prevent the flames from becoming extinguished.

With such and other objects in view, the invention comprises various novel features of construction and arrangement of parts which will be set forth with particularity in the following description and claims appended hereto.

In the accompanying drawing, which illustrates one embodiment of the invention and wherein similar characters of reference indicate corresponding parts in all the views,

Figure 1 is a side view of a portion of a torch having the improved nozzle applied thereto;

Fig. 2 is a central longitudinal section of the nozzle; and

Figs. 3 and 4 are transverse sectional views.

Referring to the drawing, A designates an oxyacetylene torch of any approved construction and including acetylene gas and oxygen supply tubes 1 and 2 to which is

attached a head 3 having gas and oxygen passages 4 and 5.

The nozzle B comprises a manifold-like body 6 formed with a boss 7 which is attached to the head of the torch by a clamping nut 8, and on the manifold are nozzle projections 9 all pointing in the same direction, and each having gas and oxygen passages 10 and 11 which meet at a point inwardly from the flame orifice 12, so that the gases thoroughly mix before discharging from the nozzle. The passages 10 and 11 connect respectively with longitudinal passages 13 and 14 in the nozzle body, which latter communicate through passages 15 and 16 with the passages 4 and 5 of the head 3.

On the ends of the nozzle are downwardly extending lugs 17 projecting in the direction of the flames so as to prevent the nozzle from being brought into contact with the work.

From the foregoing description taken in connection with the accompanying drawing, the advantages of the construction and method of operation will be readily understood by those skilled in the art to which the invention appertains, and while I have described the principle of operation, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and that such changes may be made when desired as fall within the scope of the appended claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A nozzle of the class described comprising a body having a plurality of jet orifices, passages for uniting and mixing combustible gases and conducting them to the orifices, and projections on the body extending in the direction of the flame projection for preventing the orifices from being brought into too close proximity to the work.

2. A nozzle for an oxyacetylene torch or the like, comprising a nozzle body having a plurality of jet orifices all projecting flames in the same direction, and lugs on the nozzle extending in the same direction as the flame projection for preventing the orifices from

being brought into too close proximity to the work.

3. The combination of a torch having separate gas and oxygen supply pipes, a
5 nozzle having separate gas and oxygen passages, means for connecting the nozzle to the pipes, a plurality of passages leading from the first-mentioned passage of the nozzle

and uniting in a common mixing orifice, and lugs on the nozzle extending in the 10 direction of the flame projection for preventing the orifices from being brought into too close proximity to the work.

ALEXANDER FREDERICK JENKINS.

Witness:

C. R. POLLARD, Jr.