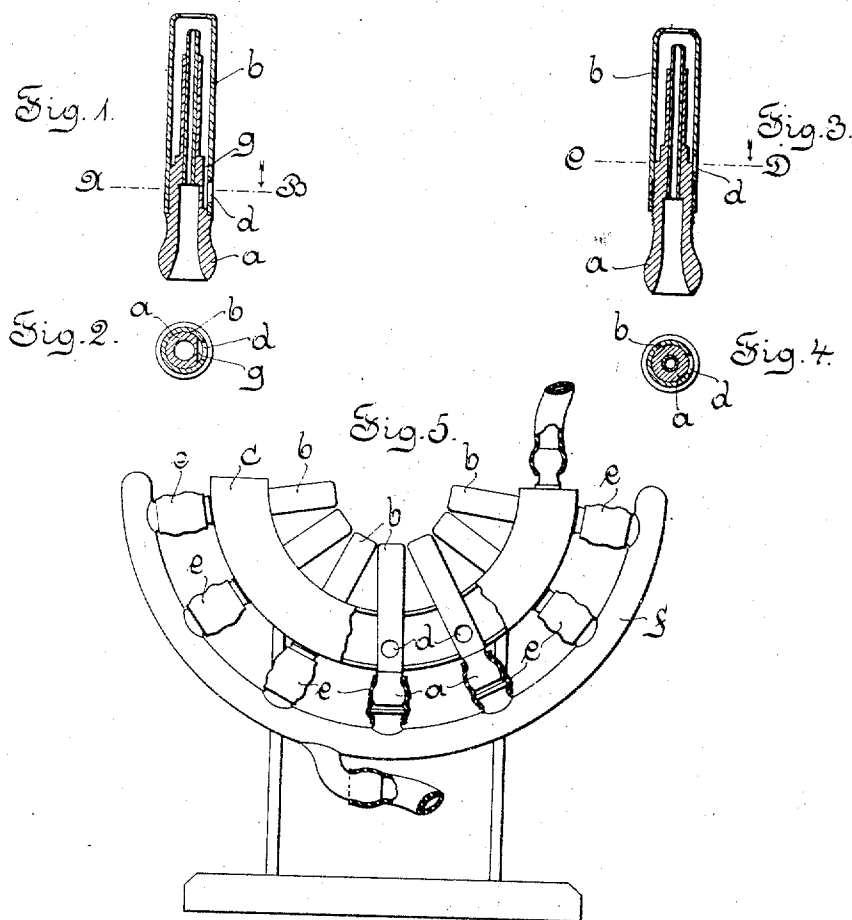


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 BURNER FOR GLASS BLOWING APPARATUS.
 APPLICATION FILED DEC. 8, 1908.

972,153.

Patented Oct. 11, 1910.



Witnesses:

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PAUL BORNKESSEL, OF MELLENBACH, GERMANY.

BURNER FOR GLASS-BLOWING APPARATUS.

972,153.

Specification of Letters Patent.

Patented Oct. 11, 1910.

Application filed December 8, 1908. Serial No. 466,528.

To all whom it may concern:

Be it known that I, PAUL BORNKESSEL, a subject of the German Emperor, and resident of Mellenbach, in Thüringen, Germany, have invented certain new and useful Improvements in Burners for Glass-Blowing Apparatus, of which the following is a specification.

In the hitherto known glass-blowing apparatus with one or more blast burners, the gas supply to each single blast burner is controlled by a separate cock, which at each use of the apparatus results in a considerable loss of time, which is dependent on the number of burners employed. Besides when using the apparatus an unintentional movement of the cocks is quite possible, which then necessitates a repeated regulation of the gas supply to the blast burners. Finally, the arrangement of cocks for each single gas supply pipe on the side of the apparatus takes so much room that it would, for instance, be impossible to place more than two glass-blowing apparatus beside each other for the same work. According to the present invention the gas supply is controlled by the revoluble or axially movable arrangement of the gas supply pipe of the blast burner relatively to its air supply pipe.

The accompanying drawing shows in Figure 1, a blast burner in longitudinal central section, in which the air supply pipe can be adjusted by simple rotation. Fig. 2 is a cross section on the line A—B of Fig. 1. Fig. 3 shows a similar sectional view to Fig. 1, in which the air supply pipe can be adjusted by being screwed in the gas supply pipe. Fig. 4 is a cross section on the line C—D of Fig. 3. Fig. 5 represents, in sectional elevation, a glass-blowing apparatus with several adjustable blast burners, arranged in a semicircle.

The blast burners employed consist each of a gas supply pipe *b* which by a lateral opening *d* is in communication with the gas chamber *c* and in which the air supply pipe *a* is arranged in revoluble manner (Figs. 1

and 2), or the latter may be screwed in the gas pipe (Figs. 3 and 4). The pipes are so arranged that by adjusting the same to each other, the openings *d* are more or less closed and thereby the gas supply is controlled. In the example shown in Fig. 5, the air supply pipes *a* are by flexible connecting members *e* in communication with the air chamber *f*, to which air is supplied under pressure.

In the blast burner shown in Figs. 1 and 2, the air supply pipe *a* has a beveled portion *g* which allows the unobstructed entrance of the gas through the hole *d* of the gas supply pipe *b*. A slight turning of the pipe *a* to the left or right would partly close the opening *d* and thus decrease the gas supply. The same effect is obtained, if pipes *a* and *b* are screwed into each other (Figs. 3 and 4). In this case, the decrease of the gas supply through the opening *d* is effected by simply screwing the pipe *a* deeper into the pipe *b*, whereby a partial covering of the opening *d* is obtained.

Having fully described my invention what I claim and desire to secure by Letters Patent is:—

A pressure gas burner comprising a gas supply chamber, a supply pipe therefor, a plurality of burner tubes projecting from said chamber, the inner ends of said burner tubes having lateral gas inlet orifices within said gas supply chamber, a supply chamber for air under pressure, a supply pipe connected thereto, a plurality of air nipples connected to said air chamber and projecting into the burner tubes, said air nipples being adjustable relatively to the burner tubes, whereby the area of the gas inlet orifices may be varied.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

PAUL BORNKESSEL.

Witnesses:

LOUIS VANDORN,
BESSIE F. DUNLAP.