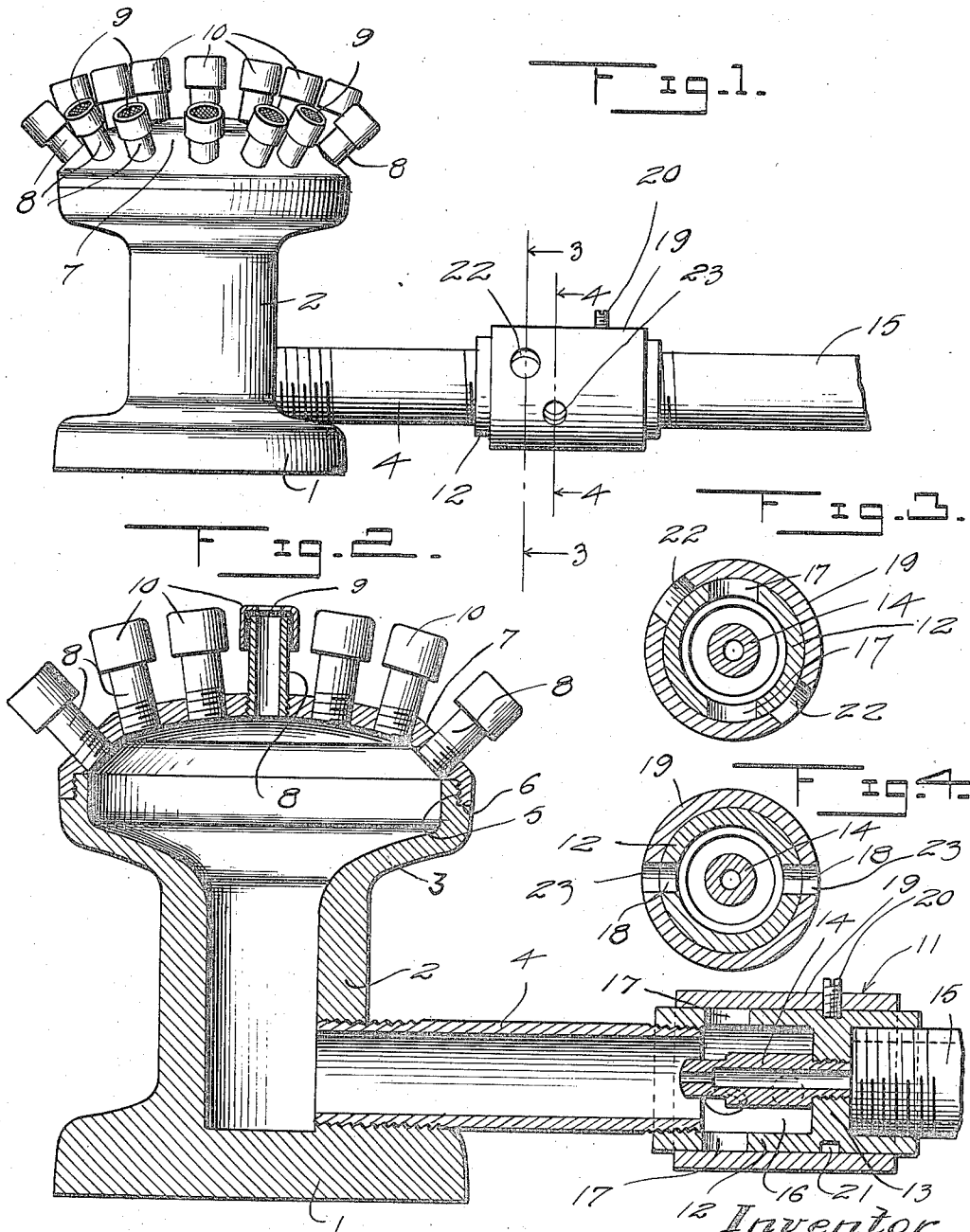


J. ANNAU.
GAS BURNER.
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1,316,668.

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Inventor
John Annau

By *Handwritten Signature*
A. H. Jitty.

UNITED STATES PATENT OFFICE.

JOHN ANNAU, OF BALTIMORE, MARYLAND.

GAS-BURNER.

1,316,668.

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To all whom it may concern:

Be it known that I, JOHN ANNAU, a citizen of Austria-Hungary, residing at Baltimore, State of Maryland, have invented certain new and useful Improvements in Gas-Burners; and I do hereby 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.

This invention relates to new and useful improvements in gas burners and has for one of its objects the provision of means whereby the amount of air can be regulated so that the device can be adapted for natural or artificial gas.

Another object of this invention is the provision of means whereby a large volume of heat will be obtainable with a considerable small consumption of gas and which heat will be directed radially and centrally from the device.

A further object of this invention is the provision of a gas burner of the above stated character which shall be simple, durable and efficient, and which may be manufactured and sold at a comparatively low cost.

With these and other objects in view as will become more apparent as the description proceeds, the invention consists in certain novel features of construction, combination, and arrangement of parts as will be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawing, in which:—

Figure 1 is a side elevation of a gas burner constructed in accordance with my invention,

Fig. 2 is a vertical sectional view of the same,

Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 1, and

Fig. 4 is a similar view taken on the line 4—4 of Fig. 1.

Referring in detail to the drawing, the numeral 1 indicates the base having formed thereon a hollow body 2 having its upper end flared as illustrated at 3. The body 2 is provided with a screw threaded opening for receiving the screw threaded end of a gas supply pipe 4. The upper end of the flared portion 3 is reduced and screw

threaded as illustrated at 5 and which reduced portion forms an annular shoulder 6 adapted to support a removable cap 7 when threaded to the reduced extension and which seats against the annular shoulder so as to establish a leak-proof connection between the body and the cap. The cap 7 is of substantially dome shape and is provided with a plurality of screw threaded openings to receive the screw threaded ends of nipples 8 having their outer ends closed by foraminous material or screens 9. The screens 9 are secured to the outer ends of the nipples 8 by collars 10. The nipples 8 are arranged upon the cap 7 in circular formation and extend radially therefrom as well as centrally therefrom, so that the flame from the burner will be directed over a considerable space.

An air mixer 11 consisting of a hollow cylindrical member 12 is threaded to the free end of the pipe 4 and has formed therein a web 13 provided with a restricted passage which is screw threaded for receiving the screw threaded end of an injector 14. The free end of the injector 14 terminates adjacent the end of the pipe 4. The other end of the cylindrical member 12 has threaded connection with an ordinary gas supply pipe 15, so that the gas will be compelled to pass through the injector 14 which has a restricted passage and mixed with air from the chamber 16 of the member 12. The member 12 is provided with pairs of oppositely disposed openings 17 and 18 for admitting air within the chamber 16. A collar 19 is rotatably mounted upon the member 12 by means of a set screw 20 fitting within an annular groove 21 and said collar is provided with pairs of openings 22 and 23 which are adapted to be moved into and out of registration with the openings 17 and 18 respectively. When the device is used with artificial gas, it is necessary to supply a considerable amount of air and the openings 22 are moved into registration with the openings 17. When the device is used in connection with natural gas a less amount of air is required and the openings 23 are moved into registration with the openings 18, thus admitting a small amount of air to the chamber 16.

While I have shown and described the preferred embodiment of my invention, it will be understood that minor changes in construction, combination and arrangement of

parts may be made without departing from the spirit and scope of the invention as claimed.

Having thus described my invention, what
5 I claim is:—

A gas burner including a body, nipples
for said body, a pipe having connection
with the body, a hollow cylindrical member
secured to said pipe, a web formed in said
10 cylindrical member and having a restricted
passage and forming a chamber within said
cylindrical member, and an injector carried
by said web, means connecting the cylindrical
member to a gas supply, said cylindrical

member having pairs of openings of 15
different sizes, and a collar rotatably secured
to the cylindrical member and having pairs
of openings of different sizes adapted to be
brought into registration with the first
named pairs of openings for regulating the 20
air through the chamber.

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

JOHN ANNAU.

Witnesses:

GEORGE BUEIX EUBAE,
JOSEPH H. PENTZ.