E. J. VOLK.

GAS BURNER.

APPLICATION FILED JUNE 27, 1918.

1,341,089. **Patented May 25, 1920.**

Fig. 1.

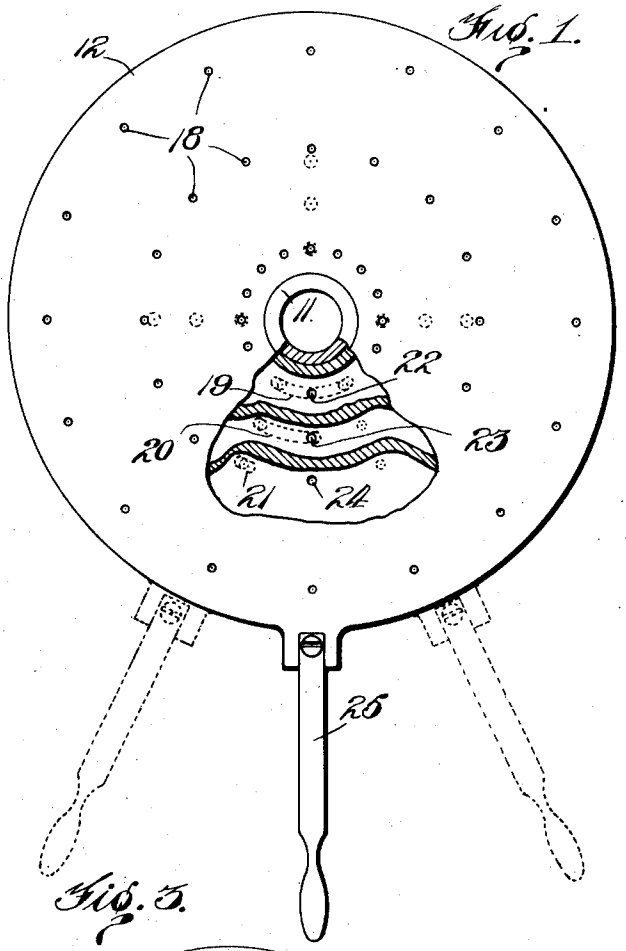


Fig. 2.

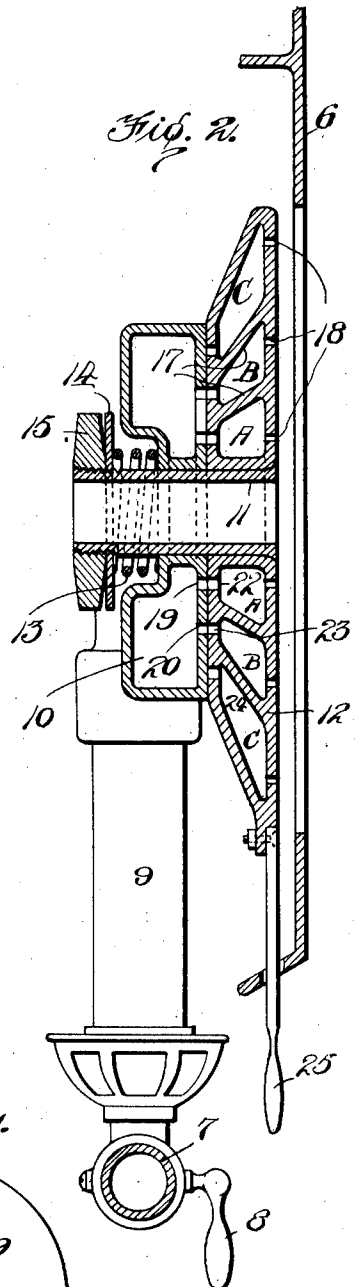


Fig. 3.

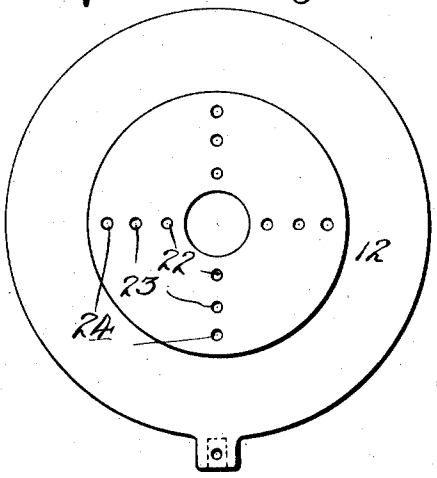
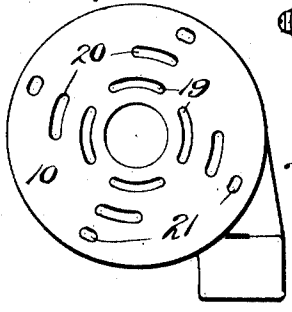


Fig. 4.



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UNITED STATES PATENT OFFICE.

EDWARD J. VOLK, OF CLEVELAND, OHIO.

GAS-BURNER.

1,341,089. Specification of Letters Patent. Patented May 25, 1920.

Application filed June 27, 1918. Serial No. 242,186.

To all whom it may concern:

Be it known that I, EDWARD J. VOLK, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Gas-Burners, of which the following is a specification.

This invention relates to gaseous fuel burners particularly adapted for use with gas stoves, and has for its object to provide an improved burner, a feature of which is that flames of various sizes can be produced for use. The burner top or cap is adjustable to various positions, and the adjustment controls or varies the amount of gas delivered to the burner openings in the cap, so that more or less will be supplied and the size of the flame will be varied accordingly. The burner may thus be adapted for vessels of various sizes, or other conditions, independent of the ordinary valve controlling the supply of gas to the burner as a whole.

One form of the invention is shown in the accompanying drawings, in which Figure 1 is a plan of the burner. Fig. 2 is a central vertical section. Fig. 3 is a plan of the under side of the upper part of the burner. Fig. 4 is a plan of the upper side of the lower part of the burner.

Referring specifically to the drawings, 6 indicates the stove top, 7 the gas supply pipe with the usual valve 8 controlling the flow of gas to the mixer 9. This mixer tube leads to a lower annular gas chamber or section 10, which is sleeved upon a central tube 11 which depends from the upper section of the burner, the sections being held together by a spring 13, coiled around the tube, washer 14, and nut 15 screwed on the lower end of the tube. The upper end of the tube is expanded over the inner edge of the upper section as shown at 16. The lower section 10 is relatively fixed, and the upper section 12 may be turned on the tube as a pivot, to various positions.

The upper section 12 is divided by conical annular partitions 17 into three annular chambers, A, B and C, and the top of the section is perforated as indicated at 18 by numerous holes to form the burner jets.

The top of the lower section 10 has therein a plurality of slots arranged in three concentric lines as indicated at 19, 20 and 21, and the lower wall of the upper section 12 is provided with corresponding rows of openings 22, 23 and 24, and one or more of the respective rows of slots and openings in the two sections may be registered with each other to supply one or more of the chambers A, B and C with gas. The top section is provided with a handle 25 by which it may be turned, and when in the position shown in Fig. 1, the slot 19 and opening 22 and slot 20 and openings 23 will register with each other and accordingly gas will be supplied to the chambers A and B. When the handle is swung to the right, as shown in dotted lines in Fig. 1, only the slot 19 and opening 22 will lap, and a small flame is produced, gas being supplied only to the chamber A. When the handle is swung to the left in Fig. 1, all three rows of slots and openings will lap, and a large flame will result, gas being supplied to all three of the chambers A, B and C.

Therefore, by manipulation of the handle, the size of the flame may be controlled and the burner is adapted for local conditions, without varying the ordinary controlling valve 8. The spring 13 holds the sections together and makes a tight joint between the contacting faces of the upper and lower sections, which fit closely together.

I claim:

1. A gas burner comprising upper and lower hollow sections rotatable with respect to each other, the sections having a series of openings more or less of which may be registered with each other by turning one of the sections, and the upper section having partitions therein forming chambers communicating with respective openings, and also having jet holes.

2. A gas burner comprising upper and lower hollow sections movable with respect to each other, the upper face of the lower section and the lower face of the upper section having a series of openings more or less of which may be registered with each other by moving one of the sections, the lower section having a gas supply thereto and the upper section having partitions therein forming separate chambers communicating with different openings, and also having jet holes.

3. A gas burner comprising a hollow lower section having a gas supply thereto, and a hollow upper section rotatable thereon and having separate annular gas chambers therein, the meeting faces of the sections having openings at different concentric lines, more or less of which may be registered

with each other by turning the upper section, and the upper section having jet holes from the respective chambers.

4. A gas burner comprising a central pivot, a hollow annular lower section thereon and provided with a gas supply, an upper section rotatable on the pivot and resting upon the lower section, the meeting faces of the sections having a series of openings arranged in concentric rows and on different radial lines, whereby more or less of the openings may be registered with each other by turning the upper section, said upper section having partitions dividing the same into separate annular chambers communicating respectively with different rows of said openings, and also having jet holes in the top thereof and a spring tending to hold the meeting faces of the sections together.

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

EDWARD J. VOLK.

Witnesses:
JOHN A. BOMMHARDT,
G. MOSENBERG.