

No. 754,651.

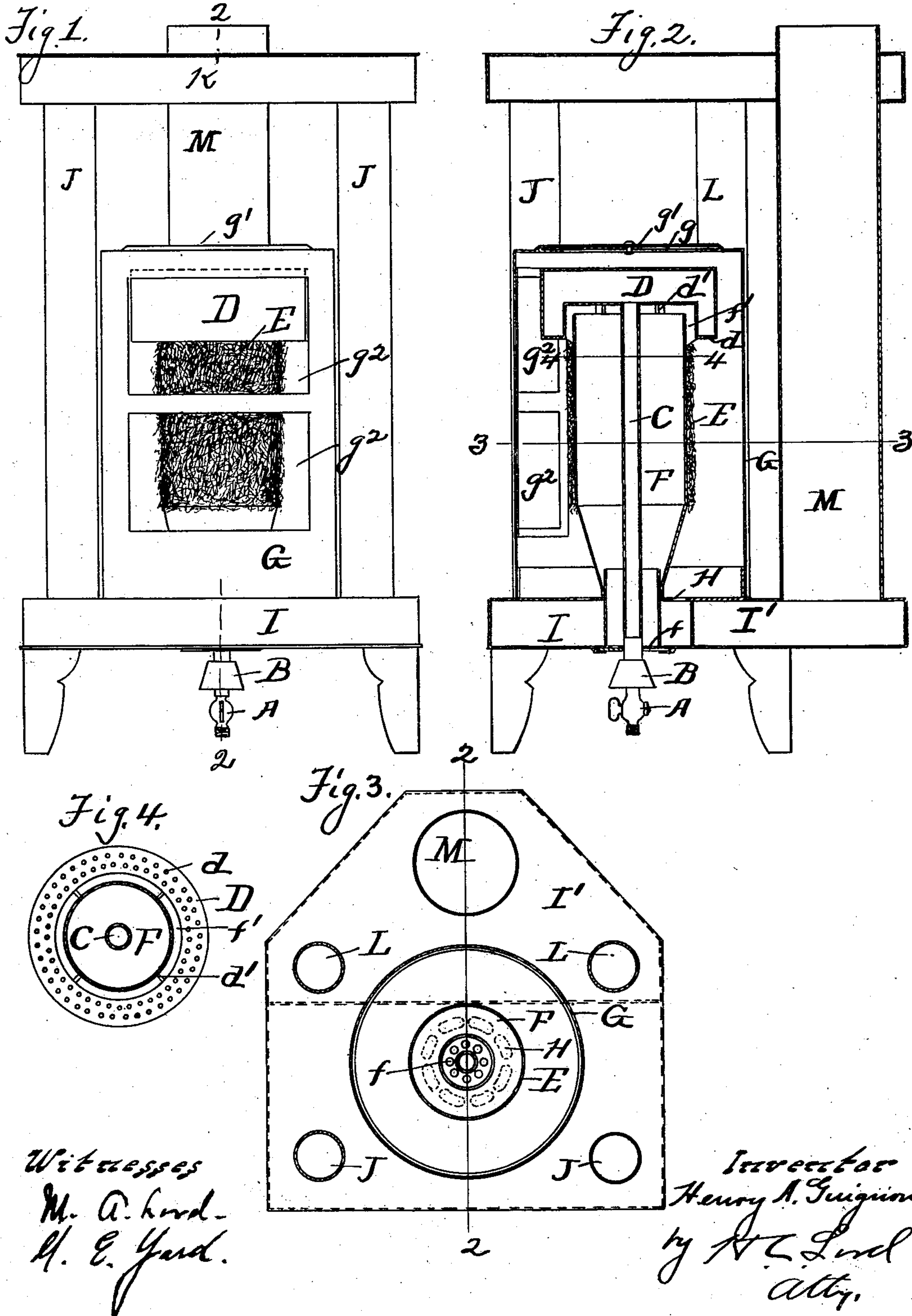
PATENTED MAR. 15, 1904.

H. A. GUIGNON.

GAS STOVE.

APPLICATION FILED APR. 12, 1902.

NO MODEL.



UNITED STATES PATENT OFFICE.

HENRY A. GUIGNON, OF CORRY, PENNSYLVANIA.

GAS-STOVE.

SPECIFICATION forming part of Letters Patent No. 754,651, dated March 15, 1904.

Application filed April 12, 1902. Serial No. 102,554. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. GUIGNON, a citizen of the United States, residing at Corry, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Gas-Stoves; 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 ap-
 10 pertains to make and use the same.

This invention relates to gas-stoves; and it consists in certain improvements in the construction thereof, as will be hereinafter fully described, and pointed out in the claims.

15 The invention is illustrated in the accompanying drawings, as follows:

Figure 1 shows a front elevation. Fig. 2 shows a section on the line 2 2 in Fig. 1. Fig. 3 shows a section on the line 3 3 in Fig. 2.
 20 Fig. 4 shows a section on the line 4 4 in Fig. 2.

The gas is admitted through the pipe A into the mixer B, of the usual form, and is conducted by the pipe C to the burner D. The burner D has the jet-openings *d*, which are
 25 arranged to invert the flame. The burner is of annular shape. The flame is directed against the fireback E, which is coated with some substance, as asbestos, for becoming incandescent under the heat of the gas-flame. Surrounding the mixer-pipe C is a central draft-
 30 passage F. This extends through the base I, and its outer opening is provided with a regulator *f*, by which the size of the opening may be regulated. The upper end of the
 35 draft-passage F is inclosed by the burner D, so that the passage *f* is formed between the wall of the passage F and the burner D. The burner is preferably provided with the shoulder *d'* to make the passage F of uniform width.
 40 The fireback and burner are inclosed by a case G, having the transparent opening *g*² therein. The case is provided at the top with the draft-opening *g*, and the register or regulator-plate *g'* is arranged to entirely close
 45 the draft-opening *g* or regulate the size of the opening. Heated gases pass from the fireback through the opening H directly into the front portion of the base I, up the flues J to the top K, down the flues L into the rear por-
 50 tion of the base I', and out the exit-pipe M.

In starting the stove the opening *g* is preferably entirely closed, the air being furnished through the central draft-passage F. As soon as the draft becomes sufficient the regulator *g'* is moved, uncovering the opening *g*. The
 55 proper adjustment of draft may be accomplished by the regulators *f* and *g'*. Proper equalization can be readily discerned by the action of the flame on the fireback E. The central draft passes up through the fireback
 60 and is deflected, so that it does not flare the flame at the fireback. The openings H are arranged within the diameter of the fireback E, so that the outer draft tends to force the flame against the fireback E, thus insuring an
 65 incandescent effect on the fireback. The heated gases direct from the flame pass first into the front part of the base, so that the base is one of the hottest parts of the stove. The arrangement of burner and fireback may
 70 be used so that the flame has an upward direction; but I prefer the inverted construction shown.

What I claim as new is—

1. In a gas-stove the combination of a burner
 75 arranged to invert the flame; a fireback; walls forming draft-passages at both sides of the flame; and a regulator on one of said passages for balancing said passages.

2. In a gas-stove the combination of an an-
 80 nular burner arranged to invert the flame; a supply-pipe leading from the bottom of said burner; and a fireback surrounding an air-passage, said supply-pipe being surrounded
 85 by said air-passage.

3. In a gas-stove the combination of an inverted burner having a downwardly-extending annular lip; and a fireback extending into
 90 said burner, said fireback having a draft-passage arranged within it adapted to deliver air between the lip and the fireback.

4. In a gas-stove the combination of a burner having a downwardly-extending annular lip; a fireback extending into said lip and forming a
 95 passage between it and the lip said fireback having an air-passage extending through it to said passage between the fireback and the lip; walls forming an exit-passage at the bottom of the fireback; and walls having a draft-open-
 100 ing arranged to deliver air outside of the flame.

5. In a gas-stove the combination of the burner D, having a downwardly-extending annular lip; a fireback E, extending into said burner and inclosing the air-passage F; a regulator *f*, for said air-passage; an outer case G having an opening *g*, in the top thereof; a regulator for said opening; walls forming an exit-passage H, of smaller diameter than the fireback E; and the base I, into which said
10 exit-passage leads.

6. In a gas-stove the combination of an an-

nular burner; front base I, to which the heated gases pass direct from the burner; the flues J leading from the base I; the top K, into which the flues J lead; flues L, leading from the top 15 K, to the rear base I'; and an exit-pipe G.

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

HENRY A. GUIGNON.

Witnesses:

C. R. POWELL,

G. L. GUIGNON.