

No. 659,471.

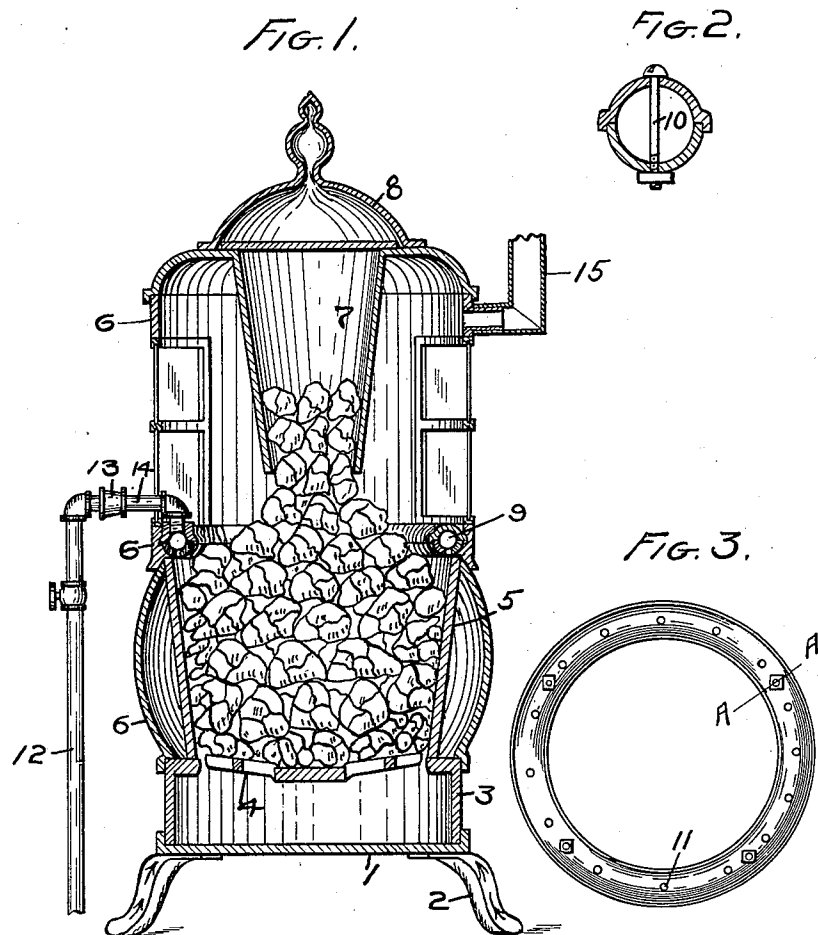
Patented Oct. 9, 1900.

G. E. FEENEY & J. E. SCHROYER.

STOVE.

(Application filed Dec. 14, 1899.)

(No Model.)



WITNESSES:
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UNITED STATES PATENT OFFICE.

GEORGE E. FEENEY AND JONES E. SCHROYER, OF INDIANAPOLIS, INDIANA.

STOVE.

SPECIFICATION forming part of Letters Patent No. 659,471, dated October 9, 1900.

Application filed December 14, 1899. Serial No. 740,273. (No model.)

To all whom it may concern:

Be it known that we, GEORGE E. FEENEY and JONES E. SCHROYER, of Indianapolis, county of Marion, and State of Indiana, have invented a certain new and useful Stove; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

This invention relates to a stove or furnace wherein a novel feature consists in the arrangement and construction of parts that enables either coal or natural gas, or both simultaneously, to be burned in the stove. Where the pressure of natural gas is not great enough to supply the necessary heat in cold weather, it is desirable to use coal along with it or to use natural gas for a portion of the year and coal in extreme cold weather. To that end in this invention a ring-shaped gas-burner is employed that is set loosely upon the upper end of the fire-pot, and the gas-outlets from said burner are all downwardly extending.

Another feature consists in so placing said ring-shaped burner with relation to the magazine of the stove that the coal will not pile upon the burner.

With such construction and arrangement coal and natural gas can be simultaneously used without any inconvenience or either one can be separately used, the downwardly-extending gas-ports from the burner will not become choked with ashes, nor will ashes fill the burner, also, the flame from the burner will be directed down against the wall of the fire-pot and against the body of the coal until it strikes the upward draft through the central portion of the stove, when it will turn upward, thus diffusing itself through the coal and mixing with the air and gases in the stove and promoting better combustion of the coal and complete combustion of the air and gases.

The full nature of our invention will appear from the accompanying drawings and the description following of one form of device embodying our said invention, and the scope of said invention will be understood from the claims following said description.

In the drawings, Figure 1 is a central vertical section of a stove provided with this invention. Fig. 2 is a section on the line A A

of Fig. 3. Fig. 3 is a bottom view of the gas-burner.

In detail the form of the invention as herein shown includes a base 1, supported on suitable legs 2, upon which rests the ash-pit 3, provided with a grate 4. A fire-pot 5 is provided within the shell and may be in any form desired. The shell 6 extends above said fire-pot, and from its upper end the coal-magazine 7 depends.

8 is a removable top that closes the coal-magazine.

The form and construction of the portion of the stove so far described may be any that is desired, as it is immaterial to this invention.

Upon the upper end of the fire-pot there is placed a ring-shaped gas-burner 9, whose external diameter is such as to enable it to fit snugly within the shell 6 and rest loosely upon the top of the fire-pot 5, whereby it can be readily removed by lifting it out of place. Said gas-burner is preferably formed of two semicircular halves connected by the bolts 10, and the gas outlets or ports 11 from the burner are on the under side, extending downward vertically. Said burner is placed at such distance below the magazine that the coal dropping from the magazine into the fire-pot will not cover the gas-burner, but will fall through the ring-shaped burner and below it. This gives free play to the flames from the gas-burner upon the body of the coal below. Thus arranged the flames will shoot downward against the fire-pot and the body of the coal until they come in contact with the draft up through the stove, which will turn the natural-gas flames upward through the coal. Any means for supplying gas to said burner under pressure may be employed; but that here shown consists of the pipe 12 from some supply of gas, having on its end the mixer 13, that causes both air and gas to pass through the pipe 14, which is inserted, preferably, through a mica opening in the stove and turned downward, entering the upper side of the gas-burner. This arrangement provides convenient entrance for the gas-supply pipe without its coming up through the stove or interfering with the ash-pit and enables the gas to be introduced above the fire-pot. This

burner can be applied to any heating or cooking stove or furnace or other heating apparatus, and it can be truly circular, rectangular, or of other form, so long as it extends about
5 on top of the fire-pot, and is open to admit coal to be used as conveniently as if the gas-burner were not in the stove.

The stove herein shown is an updraft-stove provided with a suitable flue 15.

10 What we claim as our invention, and desire to secure by Letters Patent, is—

1. The combination with a stove or furnace provided with a suitable fire-pot, of a gas-burner extending along and resting upon the
15 upper edge of the fire-pot with outlet-ports on the under side thereof, and means for supplying gas to said burner.

2. The combination with a stove provided with a suitable fire-pot and a coal-magazine,
20 of a gas-burner extending along and mounted

above the fire-pot and in such relation to the lower end of the coal-magazine that the coal therefrom will not cover the gas-burner, and means for introducing gas into said burner.

3. The combination with a stove provided
25 with a suitable fire-pot, of a gas-burner extending along and resting upon the upper edge of the fire-pot with outlet-ports therefrom on the under side, and a pipe for supplying gas to said burner from any suitable
30 source of supply that enters the stove above the fire-pot.

In witness whereof we have hereunto affixed our signatures in the presence of the witnesses herein named.

GEO. E. FEENEY.

JONES E. SCHROYER.

Witnesses:

G. H. BLAKER,

M. C. BUCK.