

(No Model.)

2 Sheets—Sheet 1.

H. RUPPEL.
VAPOR BURNER FOR STOVES.

No. 423,085.

Patented Mar. 11, 1890.

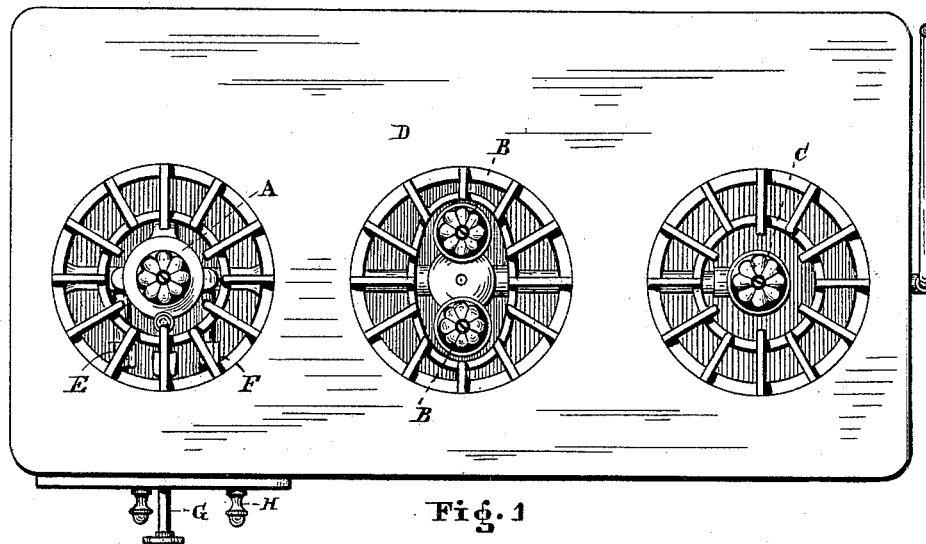


Fig. 1

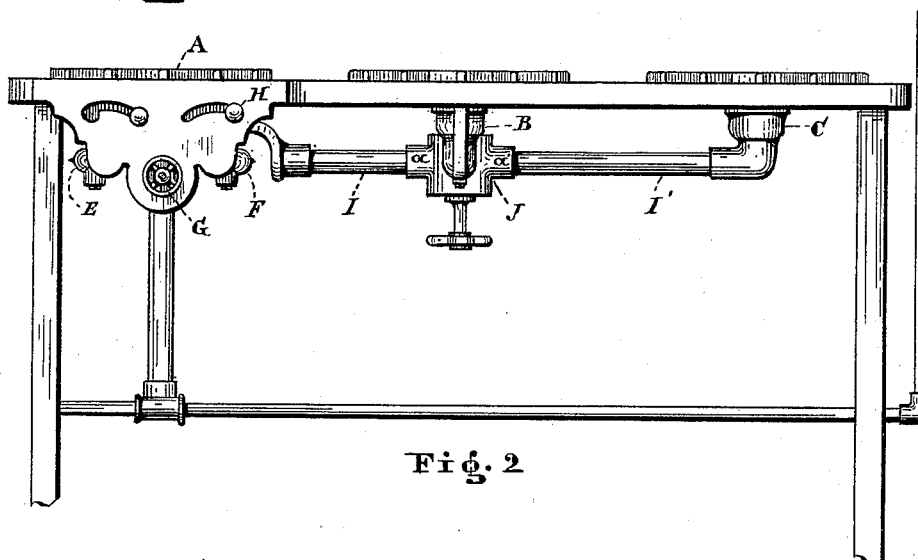


Fig. 2

WITNESSES

Wm Mears
A. Maxwell

INVENTOR

H. Ruppel
W. H. Sumner
Atty.

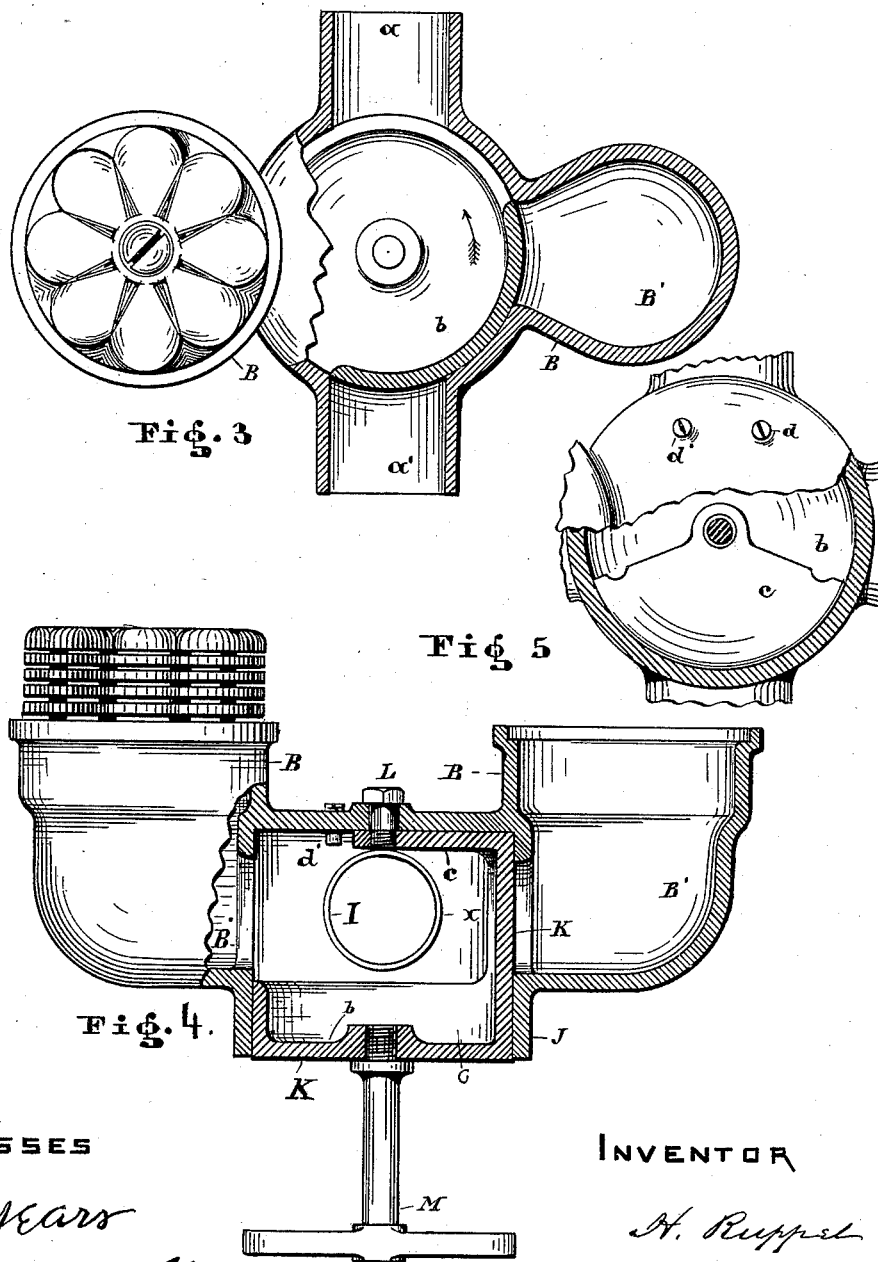
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WITNESSES

Wm. Mears
F. Maranelli

INVENTOR

H. Ruppel
W. H. Burdette
Atty.

UNITED STATES PATENT OFFICE.

HENRY RUPPEL, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF TO THE
DANGLER STOVE AND MANUFACTURING COMPANY, OF SAME PLACE.

VAPOR-BURNER FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 423,085, dated March 11, 1890.

Application filed June 10, 1889. Serial No. 313,732. (No model.)

To all whom it may concern:

Be it known that I, HENRY RUPPEL, of Cleveland, in the county of Cuyahoga and State of Ohio, a citizen of the United States, have invented certain new and useful Improvements in Vapor-Stoves; and I do hereby declare that the following is a full, true, and exact description thereof.

My invention relates to that class of vapor-stoves which are provided with a combination of two or more burners; and the invention consists in the means whereby the vapor is distributed to the various burners of the stove, one needle-valve being used for the generating-burner and another for all the supplementary burners which may be connected with the same stove-frame.

That the invention may be fully understood, reference will be had to the following specification and the accompanying drawings, in which—

Figure 1 is a plan view of a vapor-stove having the gasoline-tank removed. Fig. 2 is a front elevation of the same with the lower part of the frame broken away. Figs. 3, 4, and 5 are views in detail of the vapor-distributing parts, which will be hereinafter referred to.

Like letters of reference denote like parts in the drawings and specification.

The stove, as represented in Figs. 1 and 2, has a generating-burner and three supplementary burners. The generating-burner A is located at one end of the frame, and the other burners partly in the center and partly opposite therefrom. In the center is arranged the double burner B B, and at the end opposite the generator-burner is a single or terminal burner C. To supply said supplementary burners with vapor, so as to have either the double burner, or one of the center and the terminal burner, or only one of the center burners in operation at the same time, and all being under control of one needle-valve, is accomplished by the means and in the manner as hereinafter set forth.

As above stated, the generating-burner A is arranged at one end of the stove-plate D, as seen in Figs. 1 and 2. In said figures also two needle-valves E and F are shown, although only one of them (F) is essential to

accomplish the results sought for. The central valve G controls the generating-burner, and the construction of said burner and valve is or may be of the ordinary kind. The outlet of the valve F, which is at right angles, or nearly so, to that of the valve G, is under control of a needle-valve and adjusted by means of a lever, the handle of which is seen at H, and the port of said valve is in communication with the vapor-generating ports of the burner.

Arranged in front and in line with the valve F along and under the stove-plate is the vapor-tube I. Said tube begins in close proximity to the valve F, and its extension I' terminates at or in the burner C opposite the burner A. The center or double burners B B are connected with the casing of a distributing-valve K, which is interposed between the tube I and its extension I', as seen in Fig. 2. By means of said valve K J the vapor with which the tube I is supplied is distributed to the burners B B and C. The particular construction of said valve is illustrated in Figs. 3, 4, and 5, wherein J represents the valve-casing proper. The combustion-chambers B' B' of the burners B B are in open relation with the inside of said casing, and the nipples a a', which lead to and from said casing, afford connection with the tubes I I', as seen in Fig. 2. The valve K, which is fitted to the circular bore of the casing J, is retained within the same by means of the screw-bolt L and turned by the handle M. The lower part of said valve extends all around said bore, as seen at C, but on or about on a line level with the nipples a a'. Only a part of the interior wall is covered by said valve, as seen in Figs. 3 and 4. By this construction the pipe I and one of the center burners is left in communication with each other and the outlet of the needle-valve F. On turning the valve K in direction of the arrow until the top plate c strikes against the pin d, Fig. 5, the tube I will also be set in communication with the tube I or valve F, and then both the end burner C and one of the center burners will be supplied with vapor. On turning the valve in reverse direction to the arrow until stopped by the pin d', then the other of the center burners and the terminal burner will be

supplied with vapor. The valve K may also be so set as to shut off the terminal burner and supply the double center burner only.

By the abovesaid means and arrangement
5 the burners can be used conjointly to concentrate the heat, or separately, according to the conditions required. In this manner one needle-valve can or may supply any number of supplementary burners in any position in
10 which they may be arranged, and only one or all may be in operation at the same time.

What I claim, and desire to secure by Letters Patent, is—

1. In a vapor-stove, the combination of the
15 burners A, B B, and C, the needle-valves G and F, the distributing-valve K of the casing J, and the tubes I I', said valves G and F being in communication with the supply-pipe and ports of the generating-burner, and the
20 casing arranged in connection with the tubes I I' and the burners B B C and in open relation to the valve F, constructed and arranged substantially as and for the purpose set forth.

2. In a vapor-stove, the generating-burner A near one end thereof, non-generating double
25 center burner B B, and a single burner C near the opposite end of the stove-frame, and the needle-valve F, in combination with the tubes I I', the casing J, and the valve K, to supply the non-generating-burners with va-
30 por, in the manner substantially as shown and set forth.

3. In a vapor-stove, the combination of a needle-valve F, a generating-burner, vapor-
35 tubes I I', a casing J, interposed between said tubes, burners B B and C, arranged in open connection with said casing, and the tube I' and the valve K, constructed and arranged substantially as and for the purpose set forth.

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

HENRY RUPPEL.

Witnesses:

W. H. BURRIDGE,

WALTER A. BIDDLE.