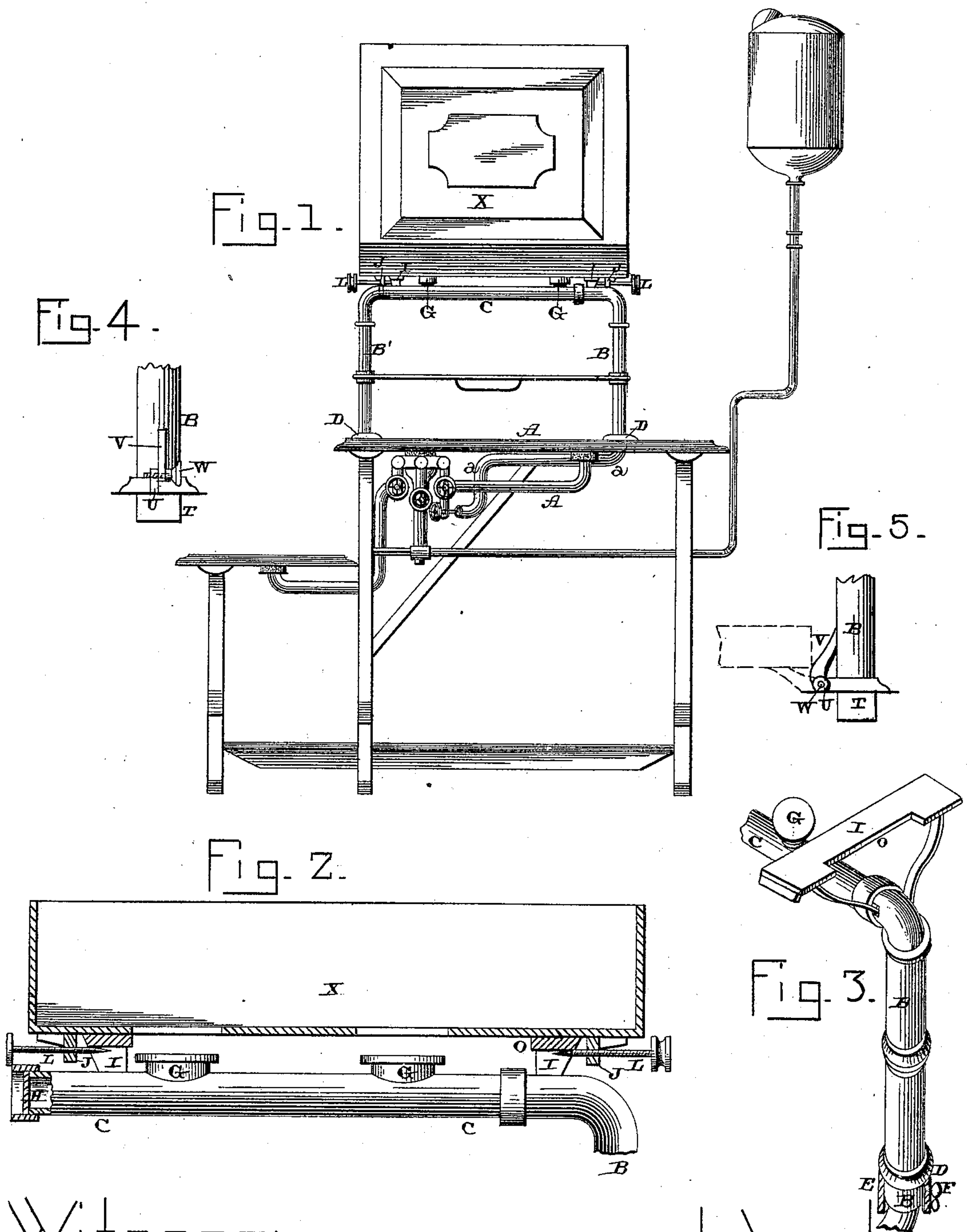


(No Model.)

Z. DAVIS.
VAPOR STOVE.

No. 405,149.

Patented June 11, 1889.



Witnesses:

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Inventor

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UNITED STATES PATENT OFFICE.

ZEBULON DAVIS, OF CLEVELAND, OHIO.

VAPOR-STOVE.

SPECIFICATION forming part of Letters Patent No. 405,149, dated June 11, 1889.

Application filed April 21, 1888. Serial No. 271,372. (No model.)

To all whom it may concern:

Be it known that I, ZEBULON DAVIS, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Vapor-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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in vapor-stoves; and it consists in the combination, with a vapor-stove, of a supporting-pipe and bracket for the elevated oven, and which pipe conducts the gas or vapor from the generating-burner to the burners which are used to heat the oven, the support being provided with suitable brackets, by means of which the oven can be moved back and forth in relation to the stove.

The object of my invention is to form a support for an elevated oven, which can be adjusted back and forth in relation to the stove, and which support forms a conductor for the gas or vapor which is to be used in heating the oven.

Figure 1 is a side elevation of a vapor-stove to which my invention is applied. Fig. 2 is a vertical section taken through the bottom of the oven and showing the manner of attaching the oven to the brackets. Fig. 3 is a perspective of one of the brackets upon which the oven rests. Figs. 4 and 5 are detached views of a modified form of connection for the pipe B.

A represents a vapor-stove of any desired shape, size, or construction that may be preferred, and to which my invention is applied.

I do not limit myself to the construction of stove here shown, for my attachment may be applied to any of the well-known forms of vapor-stoves. Passing vertically through the top of the stove A are the lower ends of the pipes B B', which are united by a cross-pipe C at their upper ends, and which pipes B B' are provided a short distance above their lower ends with the collars or flanges D, which rest upon the top of the stove, and thus support the pipe and the oven X placed thereon in position. On the under side of the top of the stove are formed the vertical cir-

cular flanges E, down into which the lower ends of the pipes B B' project, and passing horizontally through these flanges E are set-screws F, which lock the pipes B B' rigidly in position. A pipe a extends from the central generator and conducts the vapor to the pipe B to be consumed at the burners G, placed upon the pipe C, and which burners extend inside of or near to the bottom of the oven. In order to prevent the vapor from passing down through the pipe B', a suitable plug or disk H of any kind is placed in the pipe C beyond the second burner G, and this plug or disk will make a sufficiently tight fit to prevent any leakage of vapor past it.

Secured to the upper end of each of the pipes B B' is a bracket I, upon which the oven rests, and secured to the lower side of the oven, just outside of the brackets I, are the vertical perforated ears or flanges J, through which the conical set-screws L pass, and which set-screws have their inner conical ends to bear against the under sides of the brackets, as shown in Fig. 2. The inner points of the set-screws catch under and against the inclined or vertical edges of the brackets having the notches or recesses O formed in them, and the length of the notches or recesses is proportioned to the distance that the oven is to be moved horizontally back and forth. The ears J catch in these notches O, and by striking against either shoulder or end of the notch stop the horizontal movement of the oven. The set-screws L, by having their inner conical ends catch against the under sides of the outer edges of the brackets, lock the oven firmly in any desired position. When it is desired to move the oven forward upon the brackets, so that the front of the oven will be moved directly over the top of the stove and thus catch the rising currents of heat, the set-screws L are loosened, and then the oven is drawn or pushed forward in relation to the top of the stove any desired distance. If the burners G are not lighted, then the rising currents of heat from the burners of the stove may serve to keep the oven warm. Should it be desired to move the oven back out of the way, so as to leave the stove entirely unobstructed, the oven can be forced backward the length of the recesses in the brackets, and by screwing

up the set-screws can be securely locked in position.

In case it should not be desired to have the pipes B B' made in a single piece and secured to the stove by means of set-screws F, as shown in Fig. 3, the pipe will be formed in two parts, as shown in Figs. 4 and 5, and the lower portion T of the pipe will be secured to the stove by means of the set-screw F, as above described. Upon the upper portion of this short piece of pipe T is formed an ear U, and formed upon the lower end of the upper portion of the pipe is a corresponding ear V, through which the set-screw W is passed. The set-screw passes freely through the ear V and screws into the ear U and forms the pivot or hinge upon which the pipes B B', brackets, and cross-pipe C can be turned down upon the stove for convenience in transportation. The oven, being first removed from the brackets, can be packed under the stove, and thus the stove and oven for shipping will only occupy the space of a single ordinary grate.

The pipes B B', for convenience in transportation, are made detachable from both the oven and the stove, so that the pipe and the oven may be packed within the frame of the stove and under its top, and thus occupy only as much room as a stove of the ordinary construction.

Having thus described my invention, I claim—

1. The combination of a vapor-burner stove-top, with the pipes connected to its top for supporting the oven, the oven, and the cross-pipe provided with burners for heating the oven, the cross-pipe being connected to one of the supporting-pipes and receiving vapor therefrom, substantially as shown.

2. The combination of a vapor-burner stove-top, the pipes connected to the top for supporting the oven, the oven, the burner, and the pipe leading from the burner and making connection with the lower end of one of the supporting-pipes, cross-pipe C, which connects the upper ends of the supporting-pipes together, burners upon the cross-pipe for heating the oven, the supports I, secured to the supporting-pipes, the oven provided with vertical flanges, and the set-screws L, which pass through the flanges and catch against the supports, substantially as described.

3. The combination of a vapor-burner stove-top, pipes connected to the top for supporting the oven, a burner, a pipe leading from the burner and making connection with one of the supporting-pipes which serves as a conductor for the vapor, a cross-pipe which connects the upper ends of the supporting-pipes together, the burners G, placed upon the cross-pipe for holding the oven, the brackets secured to the upper ends of the pipe, and a movable oven placed upon the brackets, substantially as set forth.

4. The combination of a vapor-burner stove-top, the supporting-pipes connected thereto, one of which serves as a conductor for the vapor, the cross-pipe which connects the upper ends of the supporting-pipes together, the burners placed upon this cross-pipe, the brackets secured to the tops of the pipes, and the oven which is placed thereon, substantially as specified.

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

ZEBULON DAVIS.

Witnesses:

JOHN M. LAWTON,
F. A. LEHMANN.