(No Model.)

J. DAVIS.

STOVE FOR HEATING SOLDERING IRONS, &c.

No. 423,377. Patented Mar. 11, 1890.

Fig. 1.

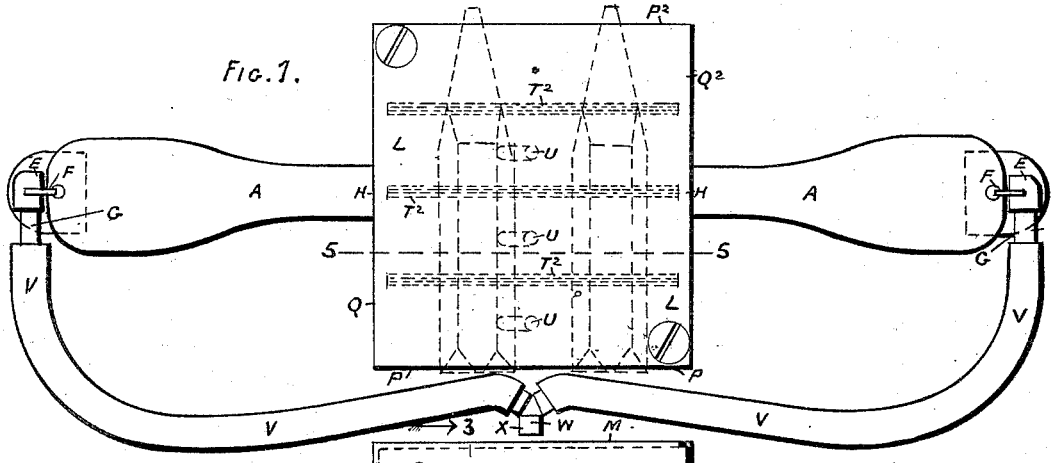


Fig. 2.

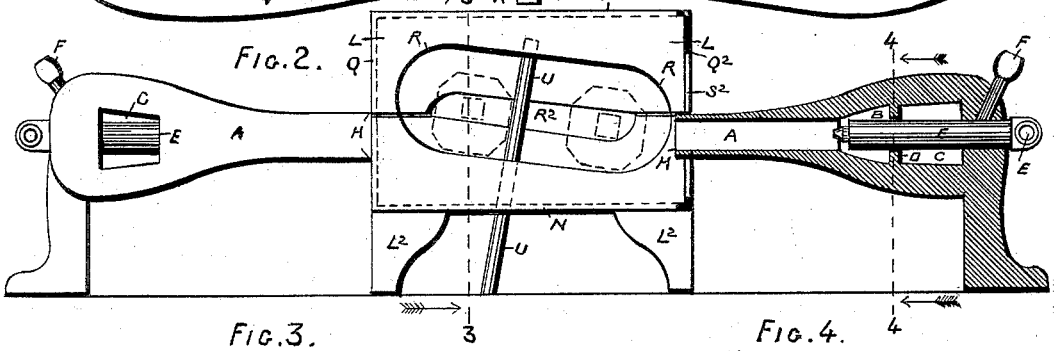


Fig. 3.

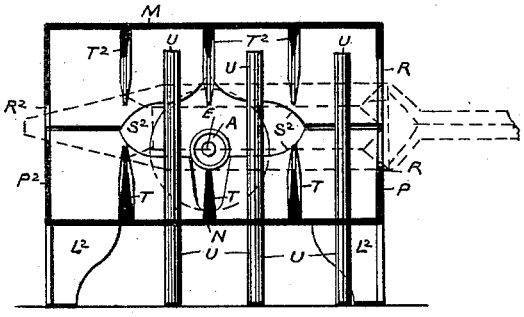


Fig. 4.

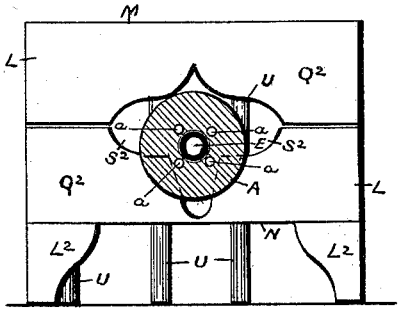
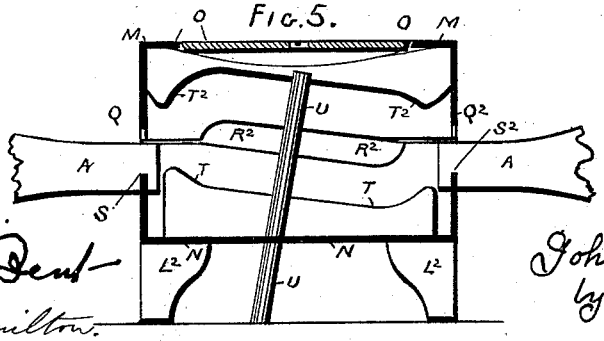


Fig. 5.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN DAVIS, OF BOSTON, MASSACHUSETTS.

STOVE FOR HEATING SOLDERING-IRONS, &c.

SPECIFICATION forming part of Letters Patent No. 423,377, dated March 11, 1890.

Application filed April 12, 1888. Serial No. 270,491. (No model.)

To all whom it may concern:

Be it known that I, JOHN DAVIS, of the city of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improved Stove for Heating Soldering-Irons, &c., of which the following is a full, clear, and exact description.

This invention relates to gas-stoves for heating soldering-irons; and it consists of a chambered stand open at its sides and on its interior having rest-ribs for the irons, in combination with two gas-burners entered into the stand at its opposite sides and each composed of an outer tube at one end portion opening into the chambered stand and partitioned intermediately and transversely into two communicating chambers, one open at the sides and the other open to said entered end portion of the tube, and an inner tube closed to the chamber open at the sides of and open to the outer tube, and with a gas-supply pipe common to and joining the inner tubes of both gas-burners, as hereinafter described, and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a plan view of the chambered stand and gas-burners of this invention. Fig. 2 is a front elevation in part and a vertical longitudinal section of a gas-burner. Figs. 3, 4, and 5 are vertical sections, lines 3 3 and 4 4, Fig. 2, and 5 5, Fig. 1, respectively.

In the drawings, A is the tubular passage, open from end to end, of the gas-burner of this invention. This passage A has two intermediate chambers B and C, separated by a wall D, having ports or passages *a a* through its thickness and making communication between the two chambers in lines parallel with the length of the passage A and at the side thereof. The chamber B is for mixing air and hydrogen gas, and the air is supplied to it through the passages *a a* from the chamber C, which has open sides for free air-communication.

E is a metal tubular passage entered lengthwise into the burner-passage A at one of its open ends and there secured by a set-screw F. The passage E is to be suitably connected at one end G to a gas-supply, and it crosses the air-supply chamber C and enters into the air-mixing chamber B, where it opens to the burner-passage A, leading directly from said chamber B at its end opposite to that at which communication is had with the air-supply chamber.

Two gas-burners such as described are shown in Figs. 1, 2, and 5. Each burner is horizontal and at one end supported by a post, making a part of it, and at the other end H, at which the gas supplied to it is burned, each is entered into and supported on the opposite sides of a common chambered stand L, having legs L^2. The burners are directly opposite to and in a direct line with each other, and each opens to the inside of the chambered stand, wherein the gas supplied to each burner is consumed. This stand L has a flat top M and bottom N, the former preferably provided with a removable cover or lid O, Fig. 5, to receive in the opening for said cover, when the cover is removed, a pot (not shown) for melting lead, boiling water, &c.

P P^2 are parallel front and rear walls, and Q Q^2 are parallel side walls, of the chambered stand. R and R^2 are openings, respectively, of the front and rear walls P P^2, and S S^2 are openings, respectively, of the side walls Q Q^2. Each gas-burner is entered and rests on the lower edge of an opening S S^2 of the side walls Q Q^2.

The bottom and top of the chambered stand and between its front and rear walls P P^2 has a series of parallel raised ribs T T^2, substantially corresponding in position and direction to the upper and lower edges of the opening R in front wall of stand. The ribs of the bottom of the stand are rests and supports to a soldering-iron entered into the chambered stand through the opening R at its front side, and its point or tip is inserted into the opening R^2 at the rear side.

Two soldering-irons (dotted lines) are shown as resting and supported as described, and so resting they cross horizontally the vertical plane of the oppositely-arranged gas-burners, and thus each iron is presented bodily to the flames issuing from the burners.

U U are fixed vertical rods on a line crossing from front to rear walls P P^2 of the stand and between its opposite side walls Q Q^2. These rods, Fig. 2, support an iron against lateral movement when at rest on the ribs T.

As shown, Fig. 1, each gas-burner has a flexible rubber-tube connection V with a com-

mon T gas-nipple W to be connected at its end X with a gas-supply, and the burners being so connected gas is then supplied to each to be burned, its combustion taking place within the chambered stand L, and in its passage thereto air is mixed with it in the air-mixing chamber B (described) of the burner.

The interior tubular passage E of the gas-burner, and which is directly connected with the gas-supply, as stated, with its set-screw F loosened, is free to be moved lengthwise of the burner tubular passage A, and thus its gas-discharging end can be adjusted in its position in relation to the air-mixing chamber B to give, as may be desired, greater or less force of draft to the gas issuing and burning at the burning end of the burner.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A furnace for heating soldering-irons, consisting of a furnace-chamber L, which is in upper and lower sections suitably held together and each interiorly having vertical ribs T T^2, projected toward each other and severally forming a throat extending across and continuous with openings R R^2 of the front and rear walls P P^2 of said chamber, in combination with gas-burners, one at and leading through the opposite side walls Q Q^2 of the furnace-chamber and within said chamber directly opposed to each other and on opposite sides of the soldering-iron to be heated and within said chamber, and each of said burners constructed of outer and inner tubes A E, and the outer tube A having transverse chambers C B, one C open at its sides, and by ports *a a* to the chamber B, and the inner tube E fixed and lengthwise adjustable in and crossing both chambers C B of the outer tube A, and at one end open to chamber B and at the other end connected to a gas-supply, as described, for the purposes specified.

2. A furnace for heating soldering-irons, consisting of a furnace-chamber L, which is in upper and lower sections suitably held together and each interiorly having vertical ribs T T^2, projected toward each other and severally forming a throat extending across and continuous with openings R R^2 of the front and rear walls P P^2 of said chamber, and which is provided with fixed vertical rods U U in a line from said front to said rear walls, in combination with gas-burners, one at and leading through the opposite side walls Q Q^2 of the furnace-chamber, and within said chamber directly opposed to each other and on opposite sides of the soldering-iron to be heated and within said chamber, and each of said burners constructed of outer and inner tubes A E, and the outer tube A having transverse chambers C B, one C open at its sides and by ports *a a* to the chamber B, and the inner tube E fixed and lengthwise adjustable in and crossing both chambers C B of the outer tube A, and at one end open to chamber B and at the other end connected to a gas-supply, as described, for the purposes specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN DAVIS.

Witnesses:
ALBERT W. BROWN,
THOMAS G. WHITE.