

(No Model.)

D. BALSLEY.
OIL STOVE.

No. 480,544.

Patented Aug. 9, 1892.

Fig. 1.

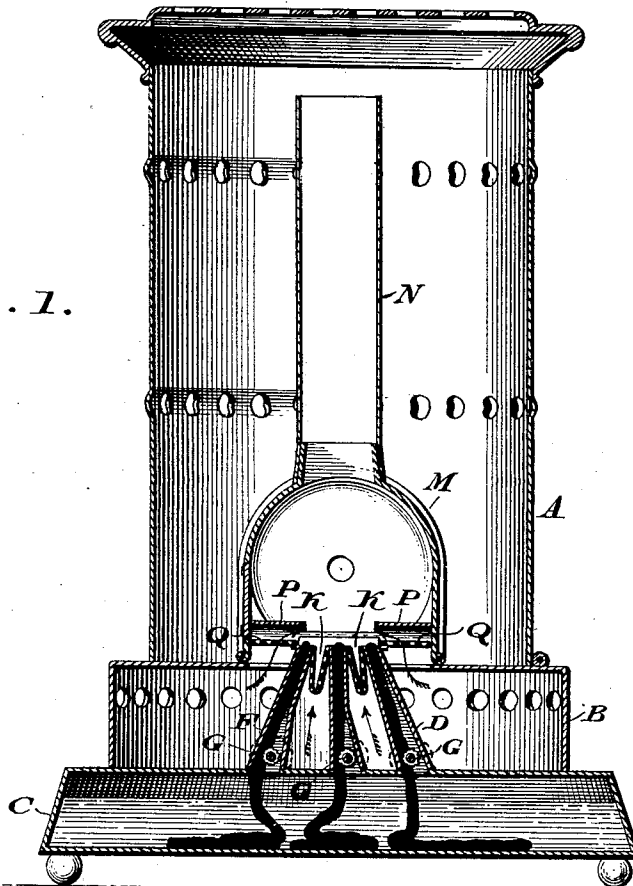
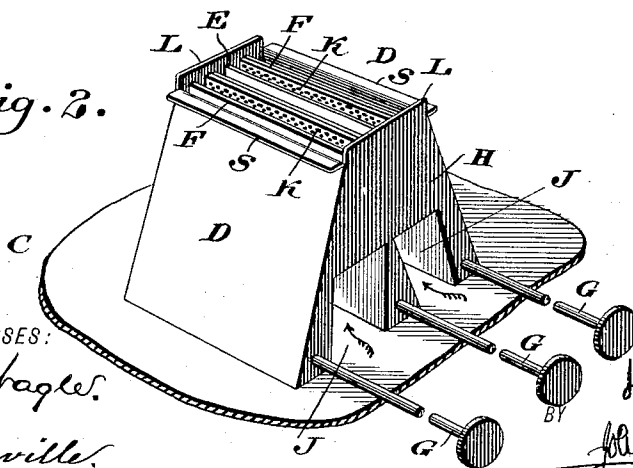


Fig. 2.



WITNESSES:

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OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 480,544, dated August 9, 1892.

Application filed August 22, 1891. Serial No. 403,383. (No model.)

To all whom it may concern:

Be it known that I, DAVID BALSLEY, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Oil-Stoves, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an oil-stove having a heating device formed of a central wick-tube and converging wick-tubes aside of the same, with caps which close the ends of the several tubes at the top thereof and permit air to reach the same from below. Perforated diaphragms are interposed between adjacent tubes, so as to uniformly distribute the air to the flames and a closed chamber above the burner, the combined parts producing a flame which is steady and of high temperature.

Figure 1 represents a vertical section of an oil-stove embodying my invention. Fig. 2 represents a perspective view of the burner on an enlarged scale.

Similar letters of reference indicate corresponding parts in the two figures.

Referring to the drawings, A designates the body of an oil-stove, B the perforated base thereof, and C the oil-reservoir.

D designates the burner, the same consisting of the central wick-tube E and the side wick-tubes F, which latter converge, thus bringing the upper ends of the three tubes closely together, the wicks in said tubes passing into the reservoir C, as will be seen in Fig. 1, each tube being provided with a wick-raiser G.

H designates plates or caps which connect the ends of the tubes and strengthen the latter, said caps being cut away at the lower portion, forming passages J, whereby air is admitted to the tops of the wick-tubes, it being evident that the combined flames of the three wicks produce a flame of intense heat and comparatively free of soot. Interposed between the tubes at the top thereof are perforated diaphragms K, whereby the ascending air is separated into jets and supplied in a uniform manner, avoiding puffing of the flame. In order to increase the peculiar action of the diaphragms, the latter are bent or doubled, thus increasing their dimensions within the short space provided for them.

L designates vertical deflectors projecting above the sides of the wick-tubes for directing drafts of air from the flame, the effect of which is evident.

M designates a hot-air chamber which is mounted within the body, closing over the burner, and having an opening at top, with the walls of which is connected the chimney or draft-flue N, the latter extending to nearly the top of the body A, as shown in dotted lines.

At the base of the chamber, on opposite sides of the top of the burner and projecting inwardly from the walls of said chamber, are deflectors P, and below the same and separated therefrom are perforated plates Q, said deflectors and plates being in horizontal position, it being seen that air passes through said plates Q and then strikes the deflectors P, whereby it is directed horizontally inwardly to the flame close to the place of combustion, the intensified heat first entering the chamber M as a drum and next the flue N, whereby it is conveyed to the top of the body, producing superior results.

Access is had to the interior of the chamber M, in order to light the burner, by means of the door R in the side of said chamber.

The inner ends of the perforated plates Q are placed on the flanges S at the top of the outer walls of the side wick-tubes of the burner, thus sustaining said ends.

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

A burner for an oil-stove, consisting of a central vertical wick-tube, side wick-tubes converging toward said central tube, perforated diaphragms interposed between the upper portions of said wick-tubes, said wick-tubes having vertical deflectors L projecting above the sides thereof, a chamber closing over said burner, horizontally-disposed deflectors P at the base of and projecting inwardly from the sides of said chamber, and perforated plates Q directly below and separated from said deflectors P, said parts being combined substantially as described.

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Witnesses:

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