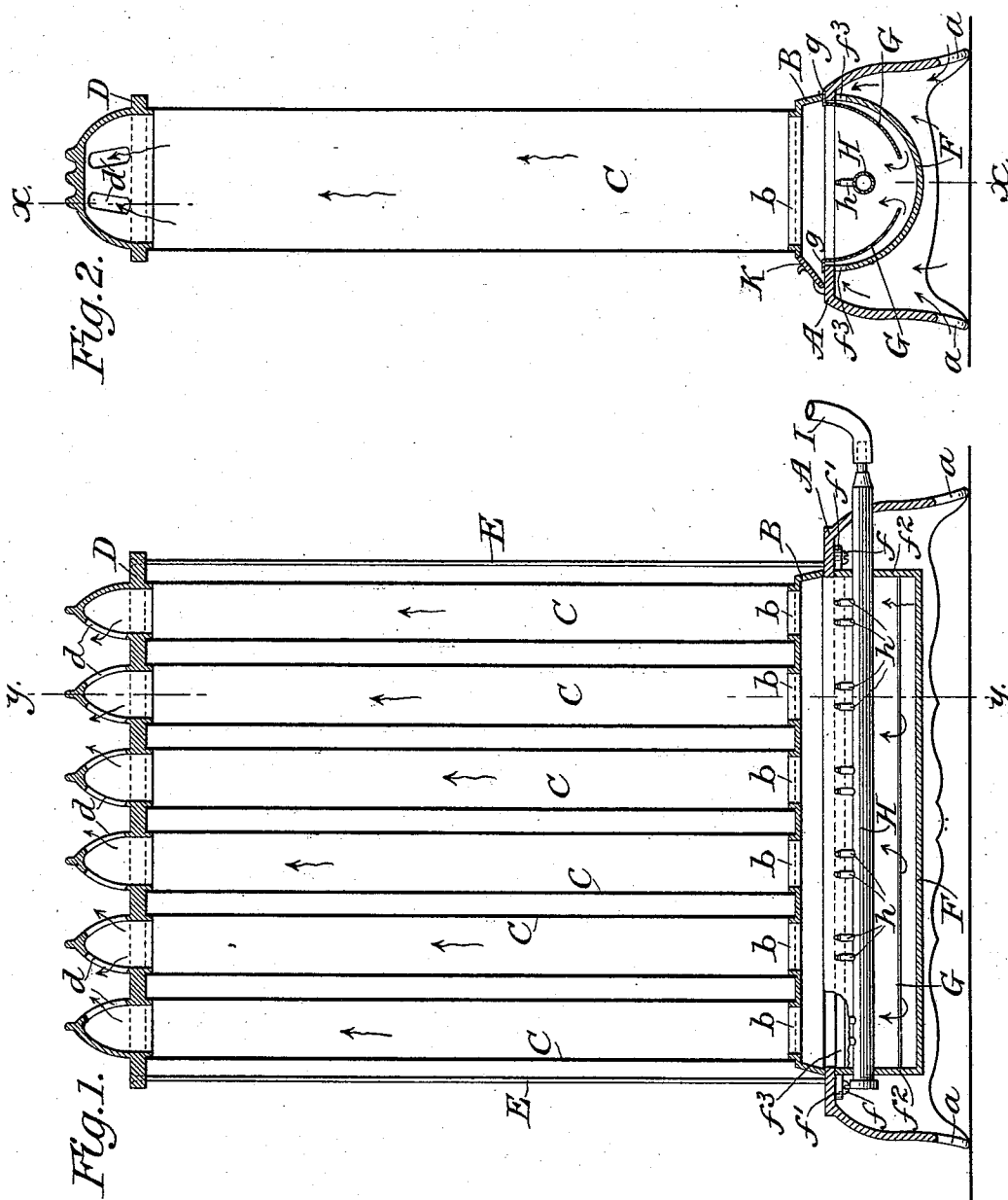


(No Model.)

L. STRIMBAN.
GAS RADIATOR.

No. 522,358.

Patented July 3, 1894.



Attest:
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UNITED STATES PATENT OFFICE.

LOUIS STRIMBAN, OF NEW YORK, N. Y.

GAS-RADIATOR.

SPECIFICATION forming part of Letters Patent No. 522,358, dated July 3, 1894.

Application filed March 28, 1894. Serial No. 505,377. (No model.)

To all whom it may concern:

Be it known that I, LOUIS STRIMBAN, a subject of the Emperor of Russia, residing in New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Gas-Radiators; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to heaters in which gas is burned as a source of heat and which are usually made somewhat in the form of steam radiators. One great objection to the use of heaters of this description, as heretofore constructed, is that there is more or less tendency of the gas flame to smoke at times, particularly when the heater is exposed to drafts of air. A further objection is that the heater must usually be taken entirely apart in order to permit access to the gas tube for the purpose of cleaning or renewing the nipples. Still another objection is that the gas-tube becomes very hot and the gas therein becomes so rarefied that it sometimes escapes from the nipples nearest the supply and does not reach those farthest, with the result that when it does again reach the more remote nipples it issues without ignition and accumulates until an explosion occurs.

It is the object of this invention to overcome these objections and particularly to so construct the heater that an abundance of fresh air shall be supplied directly below and in line with the flames whereby the gas pipe is kept reasonably cool and the air is prevented from striking laterally upon the flames and the flames are guarded effectually from the effect of gusts of air which may strike the radiator.

A further object is to enable the lower portion of the radiator to be cleaned at ease whenever required and to permit the gas tube to be removed readily without requiring the radiator to be taken apart.

In the accompanying drawings: Figure 1 is a vertical longitudinal section on the line $x-x$ of Fig. 2, through a gas radiator constructed in accordance with my invention; and Fig. 2 is a vertical transverse section on the line $y-y$ of Fig. 1.

The radiator comprises as usual, a suitable base A having feet a, a , to rest upon the floor and give free access to the air beneath the radiator, and adapted to receive a surbase B. The latter has openings b, b , in its upper side to each of which is fitted a tube or flue C. Upon the top of the flues C, C, rests a cap D which has openings d to permit circulation of the air through the flues. The parts referred to are bound together in the usual manner by tie-rods E, E.

The top of the base A is open, as usual, and beneath the opening is secured a trough or concave F which is held in place by screws or bolts f, f , which pass through ears f', f' , into the top of the base, whereby the trough can be removed easily, whenever required, without loosening the tie-rods E, E. The trough has closed ends f^2, f^2 , and is impermeate throughout its length and width except for openings f^3 which are left around each longitudinal edge of the trough between the same and the top of the base A, the ends f^2, f^2 , being carried clear up to the top of the case so as to leave no openings. Secured to each side of the base A is an apron G which is conveniently and preferably held in place by having its edge g clamped between the surbase and the top of the base A, as shown at the right in Fig. 2. Each apron extends downwardly and inwardly toward a line above the middle longitudinal line of the trough F, which stands far enough from the adjacent side of the trough F to permit a free flow of air through the openings f^3 and between the trough and apron downwardly toward the middle line. The aprons G, G, do not meet but leave a space between their edges which is not only sufficient to permit a free flow of the air but is also sufficient to permit the gas pipe H to be moved freely through the same. The said pipe H is supported in the ends f^2, f^2 , of the trough F and projects through one end of the base A in the usual manner for connection with the supply pipe I. The gas pipe H is provided on its upper side with one or more nipples h, h , or burner orifices for each tube or flue C. A door K is provided as usual in the surbase B for convenience in lighting the gas as it issues from the burners. It will be readily understood from the foregoing description that the air which is sup-

plied to the flames to permit and maintain combustion and also to be heated during its passage through the tubes C, C, must enter the radiator through the openings f^3, f^3 , and
5 must then pass downwardly and be delivered between the edges of the aprons G, G, in an upward direction directly beneath the gas-tube H, and furthermore that it will be impossible for any drafts or gusts of air to strike
10 laterally upon the flames. Consequently the supply of air to the flames is always directly from below and is always steady, whereby there is no tendency of the flames to flicker and smoke and the gas-tube is kept cool.
15 Moreover the trough F not only guards the opening between the edges of the apron from such gusts of air as might cause flickering of the flame but receives all dust and dirt which may gather inside of the radiator and prevents it from dropping upon the floor beneath.
20 At the same time whenever it is desired to clean out the radiator or replace the nipples of the gas-tube the trough F and gas-tube can be readily removed together by withdrawing

the bolts or screws f, f , the gas-tube passing 25 freely between the edges of the aprons G, G, which remain attached to the base.

I claim as my invention—

In a gas radiator, the combination with a base, of a trough having lugs by which it may 30 be secured to the underside of the top of said base and having closed ends, a gas-tube disposed longitudinally in said trough and supported by the ends thereof, and aprons secured to said base and extended downwardly 35 and inwardly toward a line below said gas-tube, the edges of said aprons being separated and openings being provided along the upper edges of said trough, substantially as shown and described. 40

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LOUIS STRIMBAN.

Witnesses:

A. N. JESBERA,
A. WIDDER.