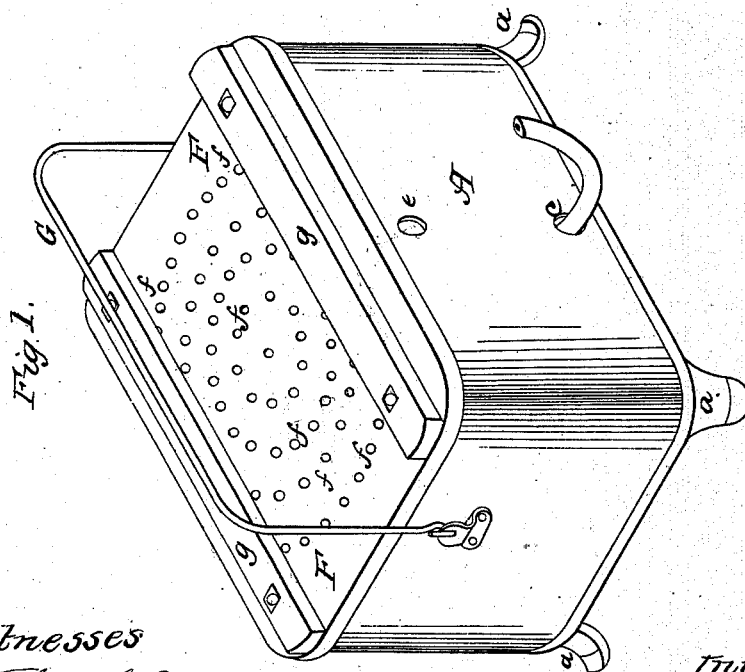
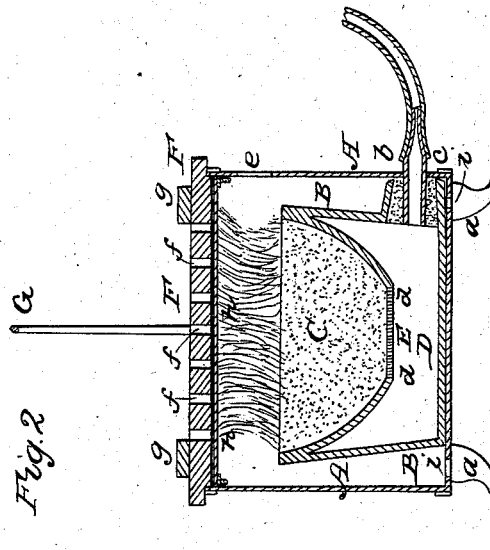


C. L. PALMER.

Foot Warmer.

No. 47,327.

Patented April 18, 1865.



Witnesses
Robert H. Mearns
N. W. Stearns.

Inventor
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UNITED STATES PATENT OFFICE.

CHARLES L. PALMER, OF BROOKLINE, MASSACHUSETTS.

FOOT-WARMER.

Specification forming part of Letters Patent No. 47,327, dated April 18, 1865.

To all whom it may concern:

Be it known that I, CHARLES L. PALMER, of Brookline, in the county of Norfolk and State of Massachusetts, have invented an Improved Foot-Warmer, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of my improved foot-warmer. Fig. 2 is a vertical transverse section through the same.

In many places it is frequently desirable to have sufficient heat to warm the feet for a short time without the necessity of warming the whole apartment; and my invention has for its object to produce a portable gas foot-warmer of simple construction which can be readily carried from room to room and attached to any suitable gas-burner by means of a flexible tube, and consists in a box, on the bottom of which is placed a receptacle filled with sand, through which the gas passes and at the top of which it is burned, a plate of soapstone or other suitable material on which to rest the feet being placed over the flame.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents a metal box or casing supported on feet *a*. On the bottom of the box A rests an earthenware receptacle, B, the upper portion of which is filled with sand C. This receptacle is of a form somewhat similar to a spittoon, as seen in section, Fig. 2, and has an aperture in its side for the introduction of a metal tube, *b*, and to the outer end of this tube, which passes through the casing A at *c*, is attached a flexible tube leading from a gas burner. The gas

passes into a chamber, D, formed in the bottom of the receptacle B, and thence through very small holes *d* in the lower part of the partition E, into contact with the sand C, through which it is diffused, and at the top of which it is ignited by passing a lighted match through a hole, *e*, in the casing A.

F is a plate, of soapstone or other suitable material, which fits into the top of the box A, as seen in Fig. 2, and forms a foot-rest. This plate is perforated with holes *f*, through which the heat passes, and is provided on top with cleats or strips *g*, of wood or other non-conducting material, so as to avoid the liability of burning the boots.

h is a screen of wire-gauze secured to the under side of the plate F, for the purpose of preventing the flame from passing up through the holes *f* and burning the feet.

The bottom of the box A is provided with a number of holes, *i*, through which a current of air passes upward to aid combustion.

G is a bail or handle secured to the box A, by which means the whole apparatus may be readily carried from one place to another.

By thus passing the gas through a body of sand, on top of which it is ignited, the flame is extended over a large surface, thus rapidly heating the plate F.

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

A foot-warmer consisting of a receptacle, B, for holding sand, upon the surface of which the gas is burned, and a box or casing, A, provided with a perforated foot-rest, substantially as described.

CHARLES L. PALMER.

Witnesses:

P. E. TESCHEMACHER,
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