

E. H. REYNOLDS.

Foot Stove.

No. 47,749.

Patented May 16, 1865.

Fig. 1

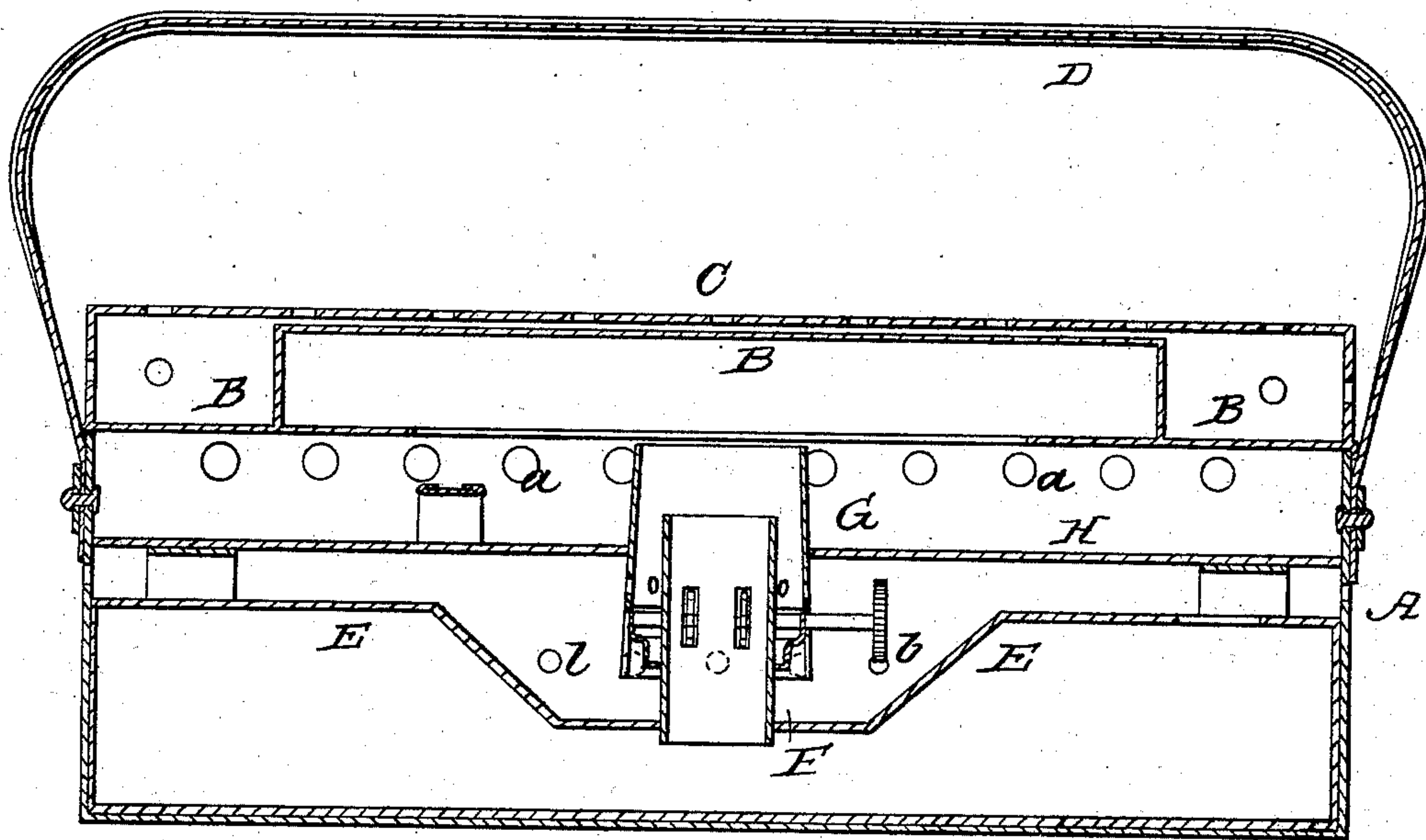
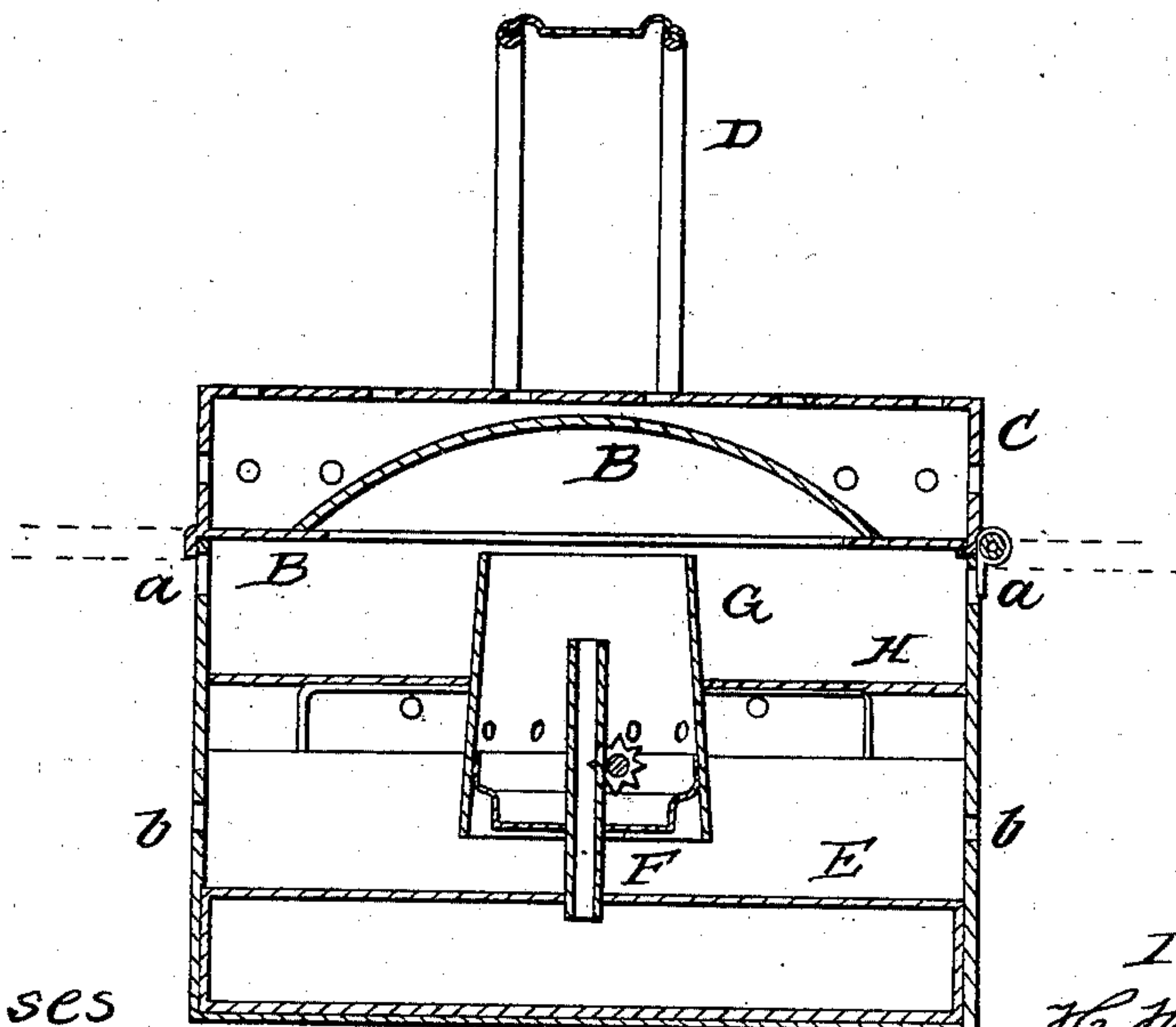


Fig. 2



Witnesses
W. R. Delany
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UNITED STATES PATENT OFFICE.

EDWIN H. REYNOLDS, OF RISING SUN, MARYLAND.

IMPROVED FOOT-STOVE.

Specification forming part of Letters Patent No. 47,749, dated May 16, 1865; antedated May 9, 1865.

To all whom it may concern:

Be it known that I, E. H. REYNOLDS, of Rising Sun, Cecil county, Maryland, have invented certain Improvements in Foot-Stoves; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to that class of foot-stoves which are intended to be used in vehicles, and which are heated by means of oil or other suitable burning-fluid; and my invention consists in a case containing an oil-reservoir and burner, and a plate so arranged in respect to the said burner and to openings in the case that the oil in the reservoir cannot be heated by the products of combustion, and so that the latter can pass from the case without entering the vehicle.

In order to enable others skilled in the art to make and use my invention I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 is a longitudinal section of my improved foot-stove; and Fig. 2, a transverse section on the line 1 2, Fig. 1.

A is an oblong metal case, to which is hinged a lid, B, the center of the latter being arched, as shown in the drawings, and over the top of the lid extends a perforated plate, C. To the opposite ends of the case A are jointed the ends of a handle, D, and within the case fits a metal box or reservoir, E, in the center of which is a depression, as best shown in Fig. 1, and to this central portion is connected a coal-oil lamp-burner, F, the wick-tube of the said burner being surrounded by a perforated cylinder, G, which passes through a plate, H, extending across the case a short distance above the top of the reservoir E.

In both sides of the case A above the plate are a series of openings, *a*, and in the sides of the case below the said plate a series of openings, *b*.

When the stove is to be used, the reservoir E is filled with oil, the plate H is secured in its

place, the lamp lighted, and the lid turned down to the position shown in the drawing. The stove is then placed in the carriage or other vehicle, so that the openings *a* and *b* shall be below the bottom of the vehicle (shown in red lines in the drawings) and the lid on a level with the same. The air below the bottom of the vehicle will pass through the openings *b*, through the perforations in the cylinder G, around the burner, and after being heated by contact with the flame will pass, together with the heated products of combustion, into the case between the plate H and the lid, imparting its heat to the latter and then passing out of the case through the openings *c* without entering the vehicle.

Within the vehicle the air will become heated by passing through the openings in the plate C into contact with the upper side of the lid.

It will be apparent that with a stove so constructed a supply of heated air may be obtained without the inconvenience resulting from the escape into the vehicle of the products of combustion, and it will also be seen that the plate H, by preventing the heated air from coming in contact with the reservoir, maintains the latter and the oil within the same perfectly cool, while the perforated plate C serves to prevent articles in the vehicle from being injured by contact with the heated lid. If desirable, a guard of stiff wire-gauze may be used in place of the perforated plate C.

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

The reservoir E, burner F, with its cylinder G, and the partition H, the whole being arranged in respect to the case A and the openings *a* and *b* in the latter, substantially as and for the purpose specified.

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

E. H. REYNOLDS.

Witnesses:

BENSON LINCOLN,
A. E. TODD.