

CAMPBELL & BROWN.

Tinners' Fire-Pot.

No. 109,383.

Patented Nov. 22, 1870.

Fig. 1.

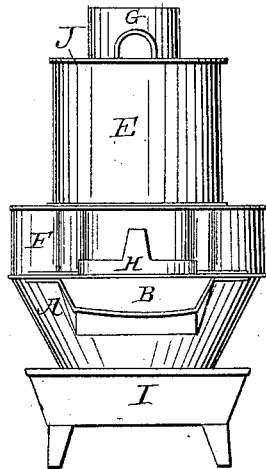


Fig. 2.

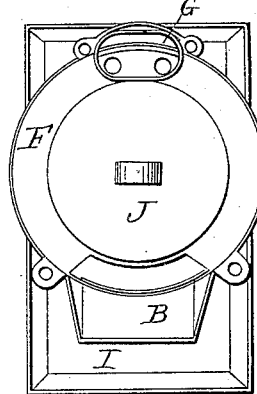


Fig. 3.

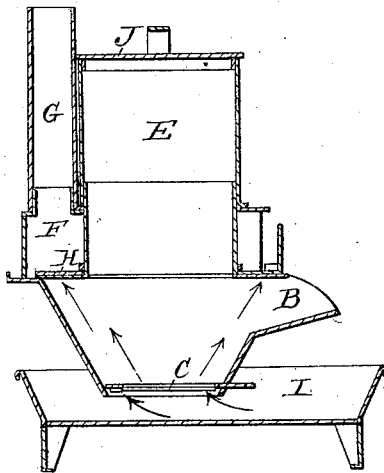


Fig. 4.

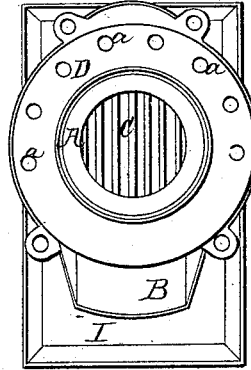
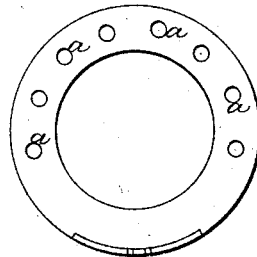


Fig. 5.



Witnesses,
W. H. Burridge
J. H. Burridge

Inventors.
Frank M. Campbell
Lorenzo W. Brown.

United States Patent Office.

FRANK M. CAMPBELL AND LORENZO W. BROWN, OF CLEVELAND, OHIO.

Letters Patent No. 109,383, dated November 22, 1870; antedated November 9, 1870.

IMPROVEMENT IN TINNERS' FIRE-POTS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, FRANK M. CAMPBELL and LORENZO W. BROWN, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and improved Tinnerns' Fire-Pot; and we do hereby declare that the following is a full, clear, and complete description of the same, reference being had to the accompanying drawing making part of this specification.

Description.

Figure 1 is a front view of the pot.

Figure 2, a view of the top.

Figure 3, a vertical transverse section.

Figures 4 and 5, detached sections.

Like letters of reference refer to like parts in the several views.

This invention has for its object a fire-pot for burning charcoal, dust, or waste, for the purpose of heating tinnerns' irons, thereby utilizing the waste, and thus economizing in the consumption of coal, in the manner as hereinafter described.

In the drawing, fig. 1—

A represents the fire-box of the pot, of which B is the mouth into which the irons are inserted for heating.

It will be observed that the box is tapering downward to the grate C, and that the top of the box is partially covered by a perforated ring, D, having a large central opening forming the coal-chamber or stack E, into which the coal is put for supplying the fire.

F is an annular flue, of which the perforated rim referred to forms the bottom, and a series of perforations, *a*, the draught-holes communicating with the fire-box and flue.

Said flue connects with and discharges into the stack or smoke-pipe G.

In fig. 5—

H is a damper lying upon the bottom of the annular flue, as shown in fig. 3, and whereby the draught-holes *a* may be closed for shutting off the draught, when required.

I is the ash-pan, in which the fire-pot stands for safety and for catching the ashes as they fall from the grate.

It is well known to those using wood-coal that,

in consequence of its friable character, a large percentage of it is lost by its being broken up in the process of handling, becoming what is called charcoal dust, which cannot be burned in the ordinary tinnerns' fire-pot, in consequence of its being too fine to admit of a draught through it, hence, instead of burning, it smothers and dies out; therefore this part of the coal is thrown away, thereby resulting in a considerable loss to the consumer.

To utilize this waste by burning it is the purpose of this invention, and which is done by confining the draught to the lower part of the fuel instead of having the draught through the entire mass of coal in the pot, as in the common fire-pot.

In our pot the fire is confined wholly in the fire-box A, the draught of which is through the holes *a* into the annular flue immediately above the fire.

By this means a strong draught is obtained, and which, having to pass through only the lower portion of the fuel, instead of ascending through any considerable body of it, the coal, however fine, will burn, as the draught is not choked by the mass of coal above. In this fire-pot the finest coal-dust is easily and readily burned without the assistance of coarse coal in order to keep it open and free for a draught.

The ashes are shaken from the fire by the grate C, which may be shaken from the front for that purpose; hence the fire can at all times be kept clear of ashes and glowing with heat, whereas the upper part of the fuel in the coal-chamber or stack E will remain unignited, and therefore not burned uselessly, as the cover J effectually stops all draught in that direction, the draught being as indicated by the arrows, and not up through the coal in the chamber E, as aforesaid.

Claim.

What we claim as our invention, and desire to secure by Letters Patent, is—

A fire-pot, when constructed with an annular flue, F, provided with a perforated bottom, D, damper H, and fire-box A, substantially in the manner as described, and for the purpose specified.

FRANK M. CAMPBELL.
LORENZO W. BROWN.

Witnesses:

J. W. BURRIDGE,
W. H. BURRIDGE,