L. R. HOUCHENS.

COMBINED DRUM AND STOVE.

No. 193,335. Patented July 24, 1877.

Fig. 1.

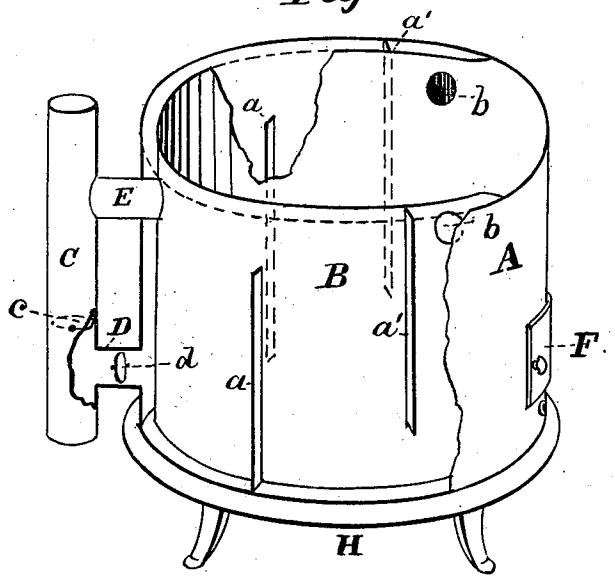
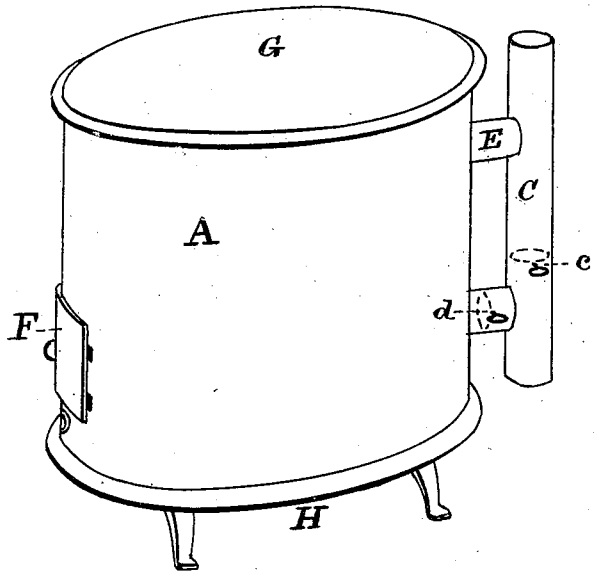


Fig. 2.



Witnesses:

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LEONIDAS R. HOUCHENS, OF FALLS CHURCH, VIRGINIA.

IMPROVEMENT IN COMBINED DRUM AND STOVE.

Specification forming part of Letters Patent No. **193,335**, dated July 24, 1877; application filed January 12, 1877.

To all whom it may concern:

Be it known that I, LEONIDAS R. HOUCHENS, of Falls Church, in the county of Fairfax and State of Virginia, have invented certain new and useful Improvements in a Combined Drum and Stove; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to a combined drum and stove, which can be used either as a drum or as a stove, or both at the same time; and my invention consists in a drum having an inner casing, with partitions between the outer and inner casings, with openings into the fire-chamber or interior of the drum, and with a door opening into said fire-chamber or interior of the drum.

In order that those skilled in the art may be able to make my invention, reference is made to the accompanying drawings, in which—

Figure 1 is a perspective view of drum and stove, with top removed, portions of the casings being also removed. Fig. 2 is an exterior view of the same in perspective.

In the drawings, A represents the outer casing; B, the inner casing; C, the main stove-pipe, passing from the stove in the room below; D, the lower pipe, through which the heat and smoke pass from the pipe C into the space between the two casings; E, the upper pipe, through which pass the heat and smoke from the fire-chamber into the main pipe. F is the door opening into the fire-chamber. G is the top and H the bottom of the drum or stove. *a a* are partitions in the space between the two casings, running from the bottom of the drum to nearly the top of the same; and *a' a'* are partitions running from the top of the drum to nearly the bottom. *b b* are openings in the inner casing to let the smoke and heat pass from the space between the two casings into the fire-chamber. *c* is a damper in the main pipe C, and *d* is a damper in the lower connecting-pipe D.

The operation of my combined drum and stove is as follows: When it is desired to use it as a drum the damper *c* is shut and the damper *d* opened. The heat and smoke then pass through the pipe C into the space between the two casings, up above the partitions *a a*, down below the partitions *a' a'*; thence upwardly to and through the openings *b b* into the fire-chamber, and thence out the pipe E into the main pipe C.

When a fire is built in the fire-chamber or center of the drum the heat and smoke pass directly out through the pipe E into the main pipe C. The device can thus be used as a stove only, or, at the same time, the heat and smoke can be allowed to pass through between the linings from the main stove-pipe C, thus getting heat in the room from both the drum and from the fire in the fire-chamber.

When it is not desired to have the heat from the lower room pass into the drum the damper *d* is closed and the damper *c* opened.

The pipes D E can be changed from the end of the stove to one side, in which case the opening in the inner lining on that side should be closed, so that the heat and smoke will pass between the two casings around to the opposite side of the drum, and out of the opening on that side into the fire-chamber.

The bottom, top, inside casing, and door can be made of sheet or cast iron, or of any other suitable material.

Having thus described my invention, what I desire to claim is—

A combined drum and stove, consisting of the casings A B, pipes C D E, door F, top G, bottom H, partitions *a a* and *a' a'*, and dampers *c d*, the casing B being provided with openings *b*, one or more, all constructed substantially as shown and described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

LEONIDAS R. HOUCHENS.

Witnesses:

A. T. ENGLAND,

WM. C. RAYMOND.