(No Model.)

G. E. LEONARD & S. A. STOWE.

DRUM TUBULAR SECTIONAL STOVE.

No. 456,960. Patented Aug. 4, 1891.

Fig. 1.

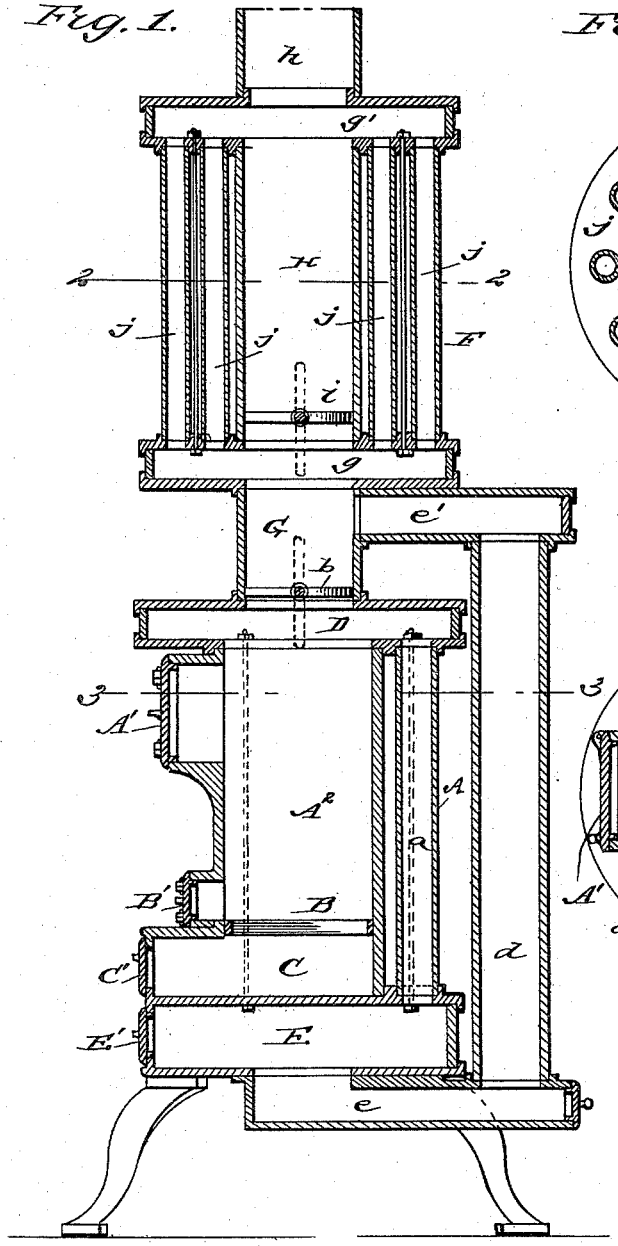


Fig. 2.

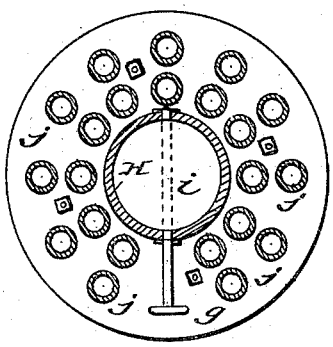
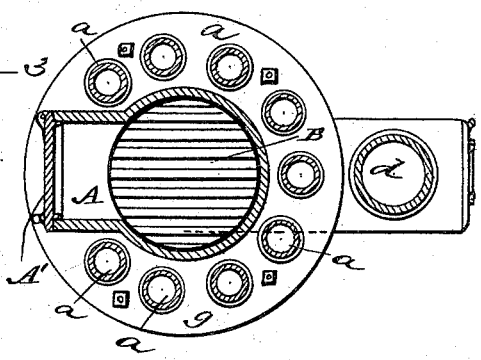


Fig. 3.



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GEORGE E. LEONARD, OF MENOMINEE, MICHIGAN, AND SILAS A. STOWE, OF NEENAH, WISCONSIN.

DRUM TUBULAR SECTIONAL STOVE.

SPECIFICATION forming part of Letters Patent No. 456,960, dated August 4, 1891.

Application filed October 23, 1890. Serial No. 369,073. (No model.)

To all whom it may concern:

Be it known that we, GEORGE E. LEONARD, of the city of Menominee, in the county of Menominee and State of Michigan, and SILAS A. STOWE, of Neenah, in the county of Winnebago and State of Wisconsin, both citizens of the United States, have invented a new and Improved Drum Tubular Sectional Stove, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical transverse section of our improved stove. Fig. 2 is a horizontal section taken on the line 2 2 in Fig. 1, and Fig. 3 is a horizontal section taken on the line 3 3 in Fig. 1.

The object of our invention is to construct a stove with an increased and variable radiating-surface.

The invention consists in the particular construction and arrangement of parts, as hereinafter fully described, and pointed out in the claims.

The stove-body A, consisting of a drum tubular section, is furnished with a fire-pot A^2, which is provided with the grate B and ash-pit C. The drum tubular section is provided with an enlarged upper portion D and a smoke-chamber E below the ash-pit. The enlarged part D communicates with the smoke-chamber E through one or more pipes *a*. The top of the body A communicates with the drum F through the pipe-section G, and the said pipe-section is provided with a damper *b*, by which direct communication between the drum F and the body of the stove may be closed, thus causing the products of combustion to pass downward through the pipe or pipes *a* into the smoke-chamber E, thence through the flue *e*, the vertical pipe *d*, and flue *e'* to the pipe G, whence it passes upward through the drum F. The drum F consists of a central pipe H, having hollow heads *g g'*, attached to opposite ends, the lower head *g* communicating with the pipe G and the upper hollow head *g'* communicating with the smoke-pipe *h*. A damper *i* is placed in the pipe H, and the hollow heads *g g'* are connected by pipes *j*. When the damper *i* is closed and the damper *b* is closed, the products of combustion pass downwardly, as before described, and when they reach the pipe G they pass upwardly through the pipes *j* to the smoke-pipe *h*. When the damper *i* is open, the products of combustion pass from the pipe G through the pipes H *j*. When the damper *i* is closed and the damper *b* is open, the products of combustion pass directly through the pipe G to the hollow head *g*, thence upward through the pipes *j* to the hollow head *g'*, thence directly to the pipe *h*. When both of the dampers *i b* are open, the draft is direct through the pipes G H *h*.

The fire-pot A^2 is provided with a feed-door A' and a draft-door B'. The ash-pit C is furnished with a draft and ash-door C', and the space E is furnished with a cleaning-door E'. It will be observed that the pipes *a* surround and incase the fire-pot, thus increasing the radiating-surface, also improving the air circulation at the surface of the fire-pot.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. In a stove, the combination, with the stove-body A, provided with the enlarged top D, and the smoke-chamber E below the ash-pit and having the flue *e* and tubes *a* connecting the enlarged top and smoke-chamber, of the pipe-section G, secured to the top D and provided with the damper *b* and the flue *e'*, and the vertical pipe *d*, connecting the flues *e e'*, substantially as described.

2. In a stove, the combination, with the drum F, provided with the damper *i*, of the stove-body A, provided with the enlarged top D, the smoke-chamber E, having the flue *e* and the tubes *a*, connecting the top D and chamber E, the pipe-section G, connecting the stove-body and drum together and provided with the damper *b* and the flue *e'*, and the pipe *d*, connecting the flues *e e'*, substantially as herein shown and described.

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SILAS A. STOWE.

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