

B. L. BRADLEY.
Hot-Air Furnace.

No. 159,383.

Patented Feb. 2, 1875.

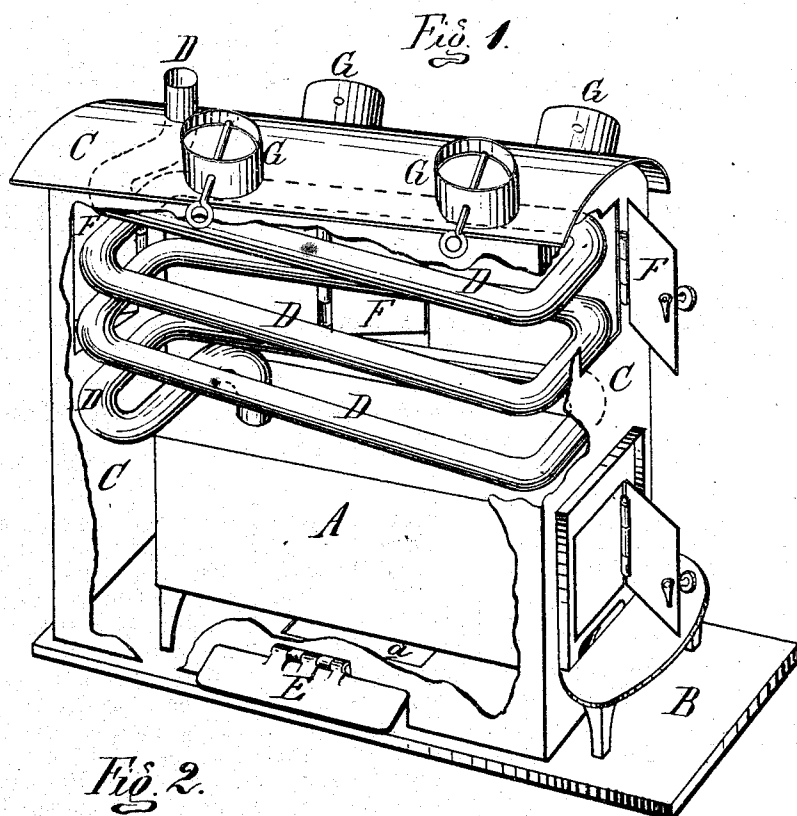
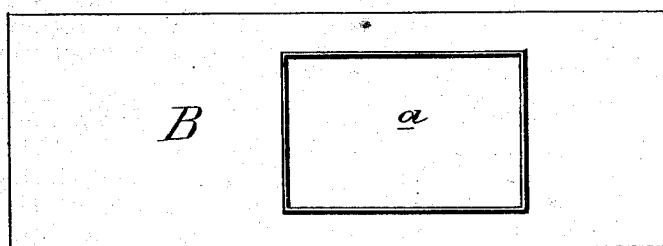


Fig. 2.



Attest:
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per Atty.
H. S. Sprague

UNITED STATES PATENT OFFICE.

BALDWIN L. BRADLEY, OF WOODSTOCK, CANADA, ASSIGNOR TO HIMSELF
AND JAMES H. FLETCHER, OF ALPENA, MICHIGAN.

IMPROVEMENT IN HOT-AIR FURNACES.

Specification forming part of Letters Patent No. **159,383**, dated February 2, 1875; application filed
October 21, 1874.

To all whom it may concern:

Be it known that I, BALDWIN L. BRADLEY, of Woodstock, in the county of Oxford and Dominion of Canada, have invented an Improvement in Hot-Air Furnaces, of which the following is a specification:

The nature of this invention relates to certain new and useful improvements in the construction of furnaces employed for heating air for distribution to the various apartments of a building which it is desired to warm.

Figure 1 is a perspective view of my improved furnace, with a portion of the case broken away to show the arrangement of parts in the interior. Fig. 2 is a plan view of the bottom of the case.

Like letters indicate like parts in each figure.

In the drawings, A represents a stove, of any desired construction, standing upon the bottom plate, B, of the shell C, within which the stove is incased, so that no part of the same is exposed outside the shell except the front, through which the stove is fed with fuel. D is the pipe leading from the stove to a suitable flue or chimney, (not shown,) for the purpose of draft and carrying off the products of combustion. This pipe is coiled within the case above the stove, as shown, between its point of communication with said stove and its point of exit from or through the shell. In the bottom of the shell, and immediately

beneath the stove, is an opening, *a*, which is designed to be connected with a pipe, (not shown,) through which cold or fresh air may be fed to the inner portion of the shell from outside the room where the furnace is placed. The two sides and rear end of the shell, and immediately above its bottom plate, are provided with doors, dampers, registers, or other suitable appliances, E, so that, at will, the air may be admitted into the shell from off the floor of the furnace-room. The sides and ends of the shell are also provided with similar devices, F, for allowing the warm air to escape from the shell whenever there is a greater volume thereof than is required to feed the hot-air pipes G, to warm the rooms with which they communicate.

The operation of this device is so simple that a further description thereof is deemed unnecessary.

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

In a hot-air furnace, the combination, with the shell C, of the stove A, coil of pipe D, opening *a*, doors, dampers, or registers E F, and hot-air pipes G, all as and for the purpose set forth.

BALDWIN L. BRADLEY.

Witnesses:

E. T. JACKSON,
C. E. HUESTIS.