C. J. PRATT.

Heating-Stoves.

No. 147,789 Patented Feb. 24, 1874.

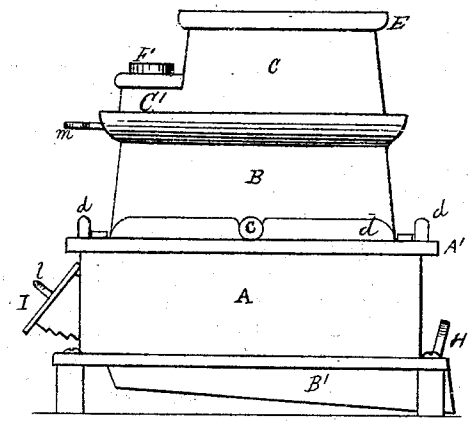

Fig. 1.

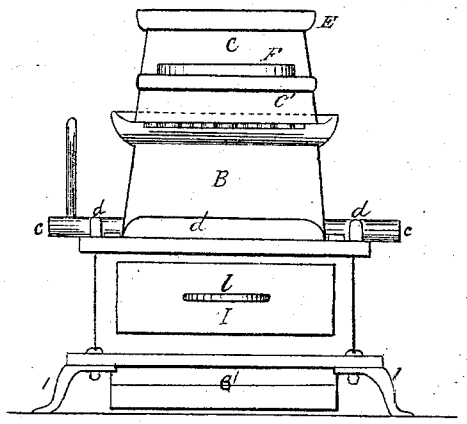

Fig. 2.

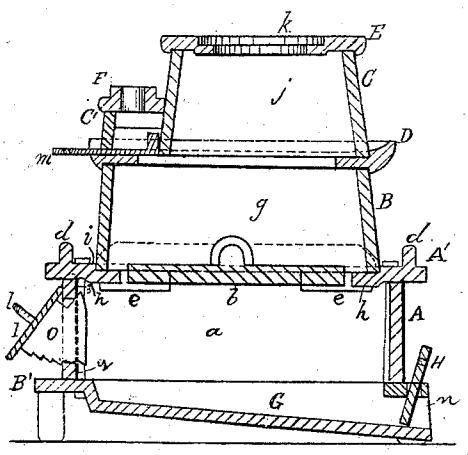

Fig. 3.

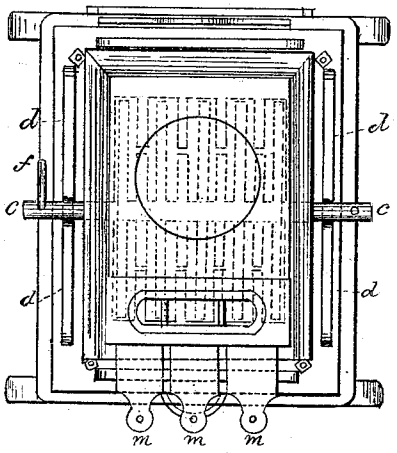

Fig. 4.

WITNESSES:

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CHARLES J. PRATT, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN HEATING-STOVES.

Specification forming part of Letters Patent No. **147,789**, dated February 24, 1874; application filed October 28, 1873.

To all whom it may concern:

Be it known that I, CHARLES J. PRATT, of the city and county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Stoves for domestic and other purposes; 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, which form a part of this specification, and in which—

Figure 1 represents a side view of the improved stove. Fig. 2 represents a front view. Fig. 3 represents a vertical and longitudinal central section on line A B, Fig. 4; and Fig. 4 represents a top or plan view of the same.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it in detail.

By reference to Fig. 3 of the drawings, it will be seen that the stove is made in three sections, the first section, A, forming the ash pit or chamber *a*, above which chamber *a* is supported the movable fire-grate *b*, the journals *c* of the movable fire-grate resting in curved slots in the side flanges *d*, which project up from the flanged part A′, which rests upon the top of the section A, as fully indicated in the drawings. The form of the entire grate is shown in dotted lines, Fig. 2, every other bar of the movable grate being longer than the others. From the inside of the flanged part of A′ project short, rigid, and stationary grate-bars *e*, corresponding to and on a line with the short movable grate-bars, while the long movable grate-bars work between the short stationary grate-bars. The movable grate-bars are operated, when desired, by means of a crank-pin, *f*, inserted in one of the journals, *c*, as indicated in the drawings. The section B, forming the fire-chamber *g*, rests upon a flange, *h*, and inside of shoulders *i*, upon the upper side of the flanged part A′, curved slots being cut out of the lower sides of the part B to fit the journals *c*, as indicated in the drawings. Upon the upper edge of the part B is arranged a flange-piece, D, and upon that rests the section C, which forms the hot-air chamber *j* above the fire-chamber *g;* and upon the top of section C is arranged the top flange-piece E, provided with an opening, *k*, to receive a kettle or other implement for domestic use, and when not used for such purpose, it may be closed with an ordinary iron cover. F is the smoke-flue, the lower part of which communicates with the fire-chamber *g* and hot-air chamber *j*, the opening being closed, in this instance, by means of three dampers or slide-valves, *m*, whereby the draft can be regulated very conveniently and perfectly. The dampers work independently of each other in the bottom of the projecting part C′ of section C, and which projecting part C′ is divided into three divisions, corresponding with the dampers *m*. Section A rests upon and is bolted to a base-piece, B′, to the under side of which are fastened supporting-legs 1. The base-piece B′ is so constructed as to form an extension of the ash-pit *a*. The bottom G of the ash-pit is constructed upon an incline, as shown in Fig. 3, and has an opening, *n*, closed by a slide-damper, H, which is arranged in a slot of a projecting part of the base-piece B′. The front of the section A has a rectangular opening, in which a damper, I, in connection with the adjacent parts, is fitted to work as follows: First, the damper I itself is a rectangular piece provided with a handle, *l*, and end pieces *o*, the lower edges of which are notched or serrated to catch on the flange 2 of section piece A, while their upper edges are slotted out to catch the upper and downwardly projecting flange 3 of the same section piece, so as to admit of its being worked or adjusted in and out to regulate the draft, and that too without screw or bolt to hold the damper in place. The damper I is also adapted to work quite as well with the serrated edges up, the slotted part catching on the lower flange of the section piece A.

As will readily be seen, the stove is simple in design, of regular pattern, and adapted for the use of fuel in an economical manner, the construction of the stove being such as to present a large heating-surface, while the magazine or reservoir for coal is of such extent compared with the size of the stove, that a continual supply of heat may be generated from a limited quantity of coal without replenishing the supply for a considerable length of time.

This stove is adapted for heating large as well as small rooms, and it is not liable to de-

rangement by use, and can be made of any desired size. Then, again, it will be seen that the stove being made in sections, it can be readily taken apart for storage or shipment or removal from one room to another, and in case one section happens to get broken in any way, or injured by use, it can be easily removed and a new section substituted with very little trouble.

The stove is well adapted for laundry purposes, since flat-irons can be arranged for heating upon the flanges *d* on all four sides of section B, and on flange D on three sides of section C, and, in addition thereto, upon the top flange E. Additional sections may be used, if desired. The ash-pit can be easily cleaned out by simply removing the slide H and inserting a small shovel through the opening *n*.

It will be noticed that by the use of the vertically-sliding stop-piece H, the stove can be conveniently used in places where it would be impossible to use a stove having a door as a substitute for the stop-piece H.

Having described my improved stove for domestic and other purposes, what I claim as new and of my invention, and desire to secure by Letters Patent, is—

1. The combination, with the section A and base-piece B′, of slotted section B and the interposed separate flanged piece A′, substantially as shown and described.

2. The combination, with the sections B and C, of the flanged piece D, dampers *m*, and smoke-flue F, substantially as and for the purposes set forth.

3. The combination, with the section A provided with flanges 2 and 3, of the reversible slotted rectangular piece I, provided with serrated end pieces *o o*, substantially as and for the purposes set forth.

4. The combination, with the base-piece B′, of the inclined bottom G and vertically-sliding stop or damper H, said parts being constructed and relatively arranged, as and for the purposes set forth.

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Witnesses:
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