

No. 120,811.

Patented Nov. 14, 1871.

William Doyle's Improved Base Burning Tailors Stove.

Fig. 1.

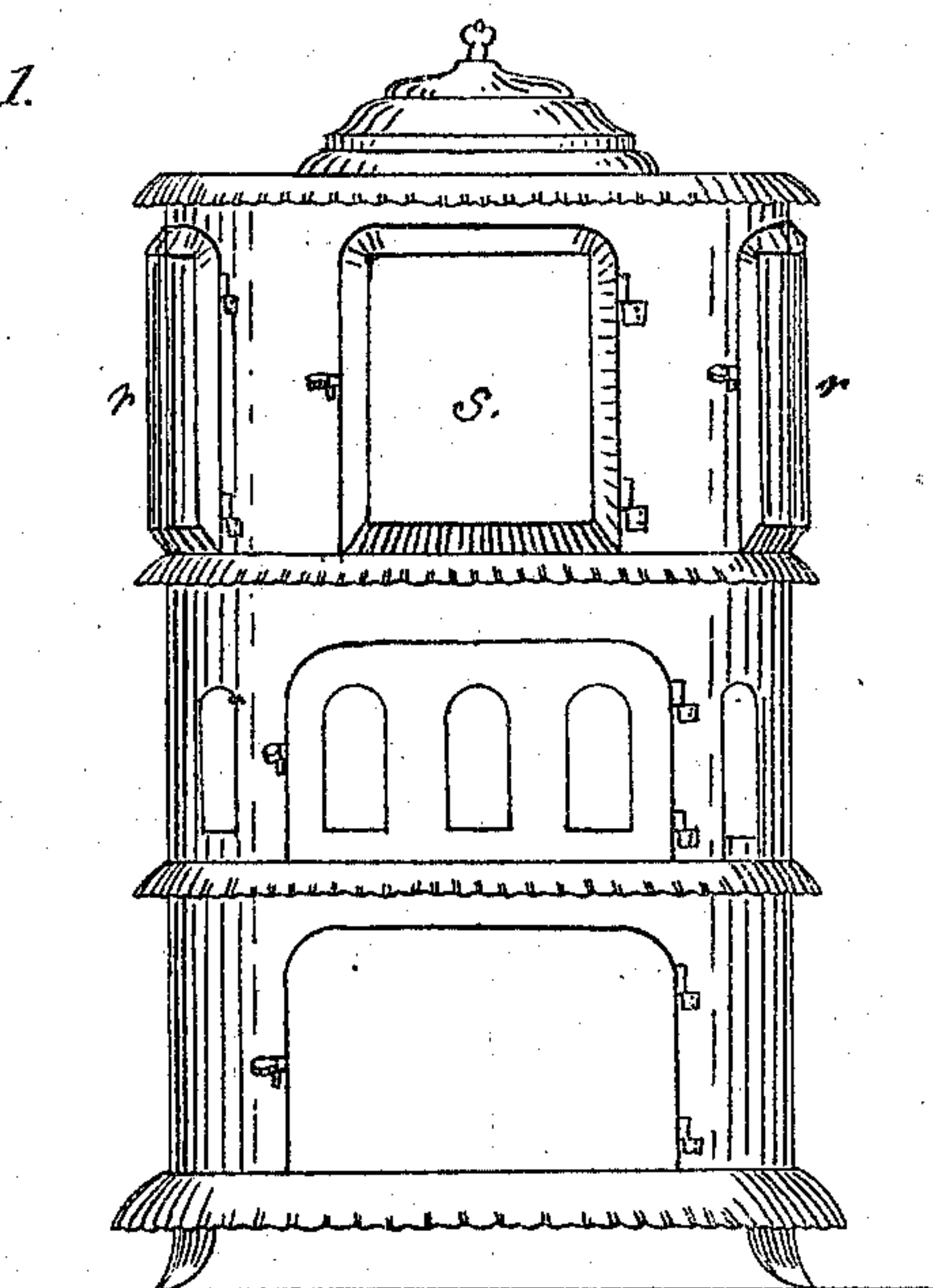


Fig. 6.

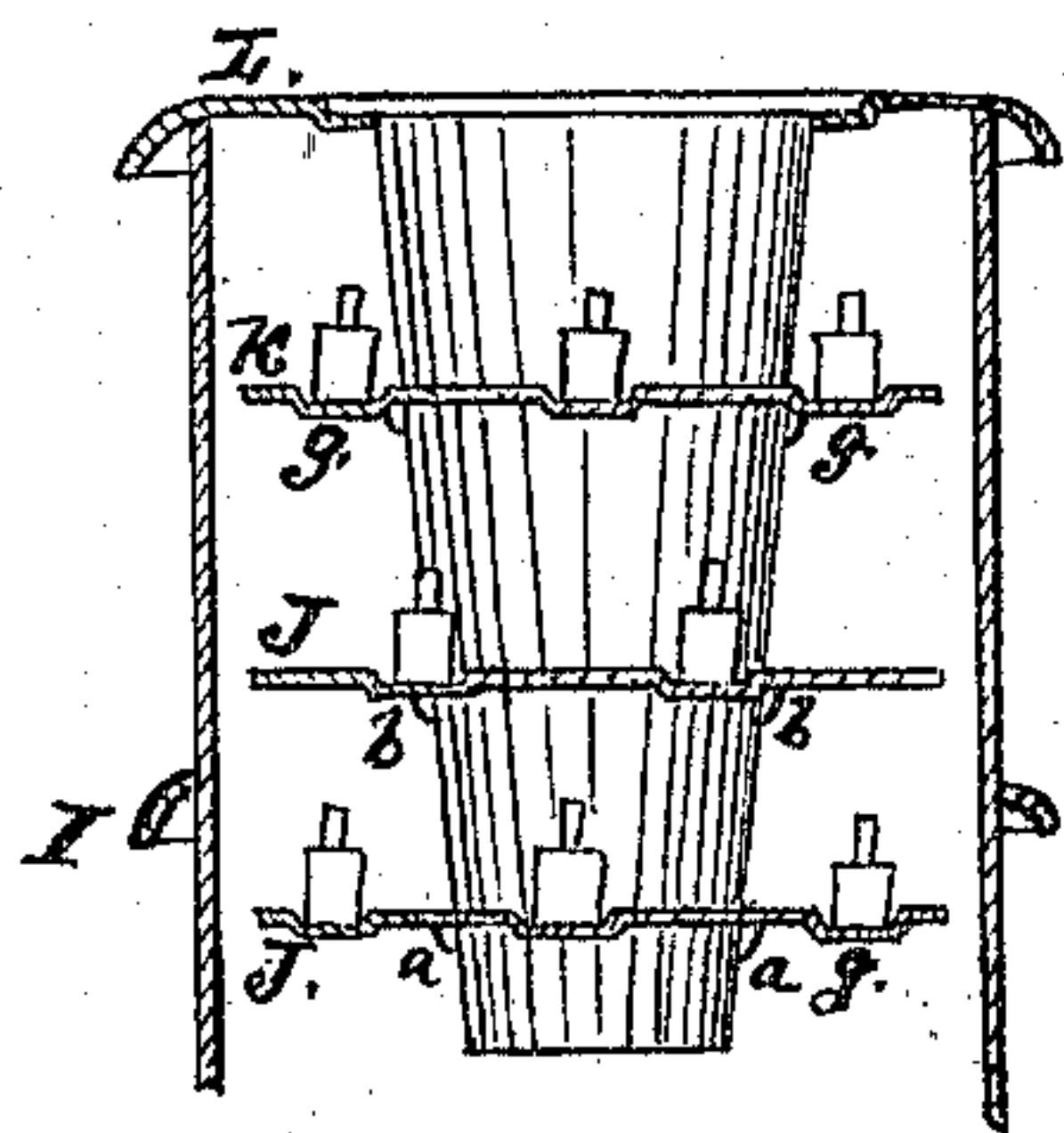


Fig. 3.

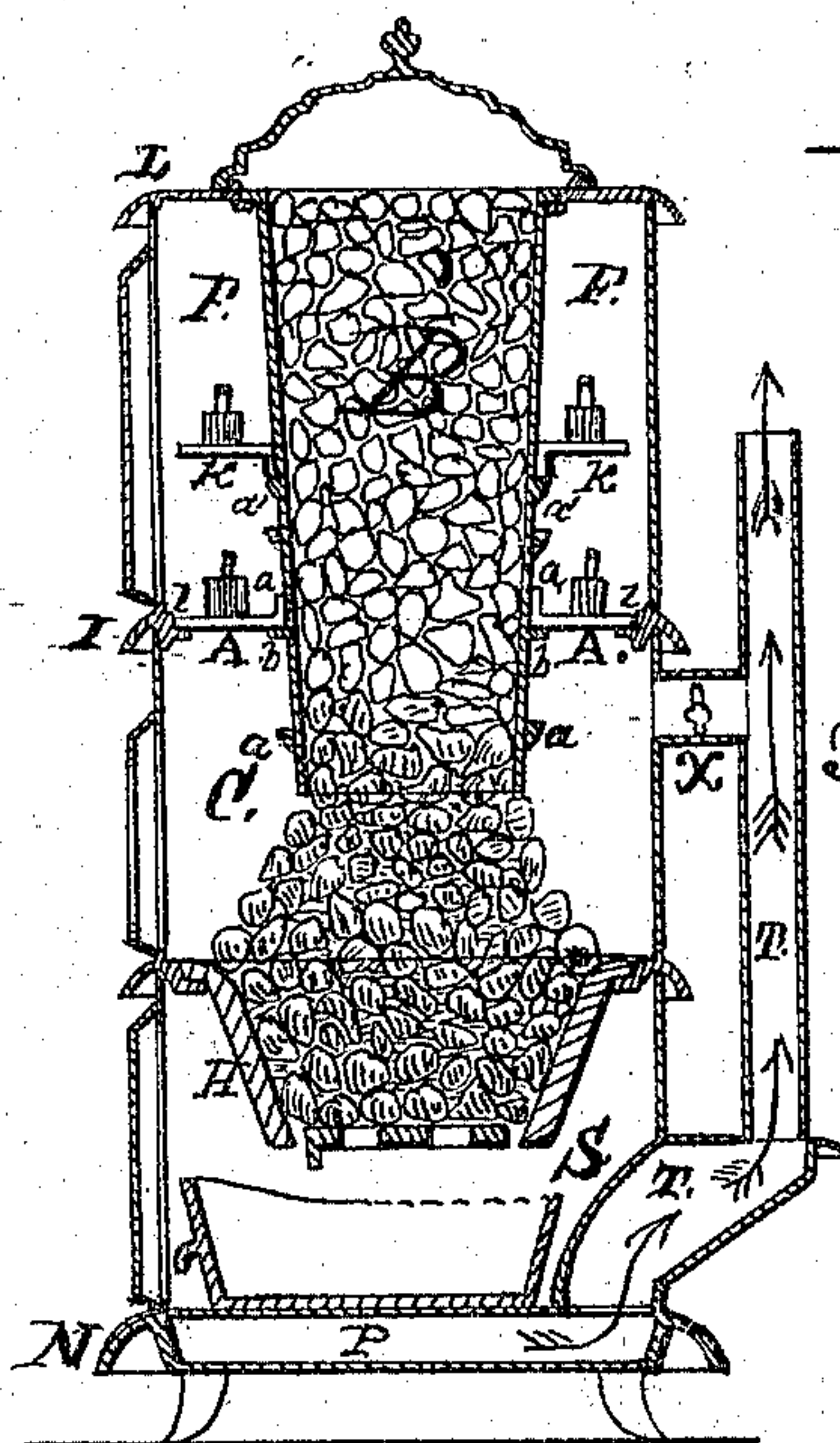


Fig. 7.

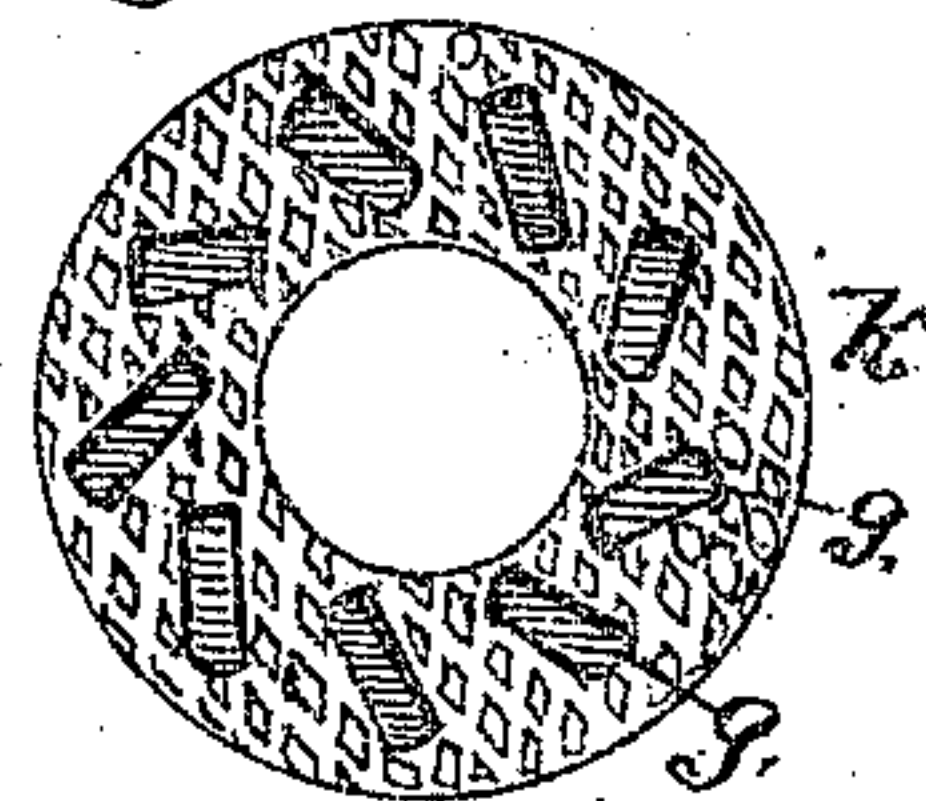


Fig. 4.

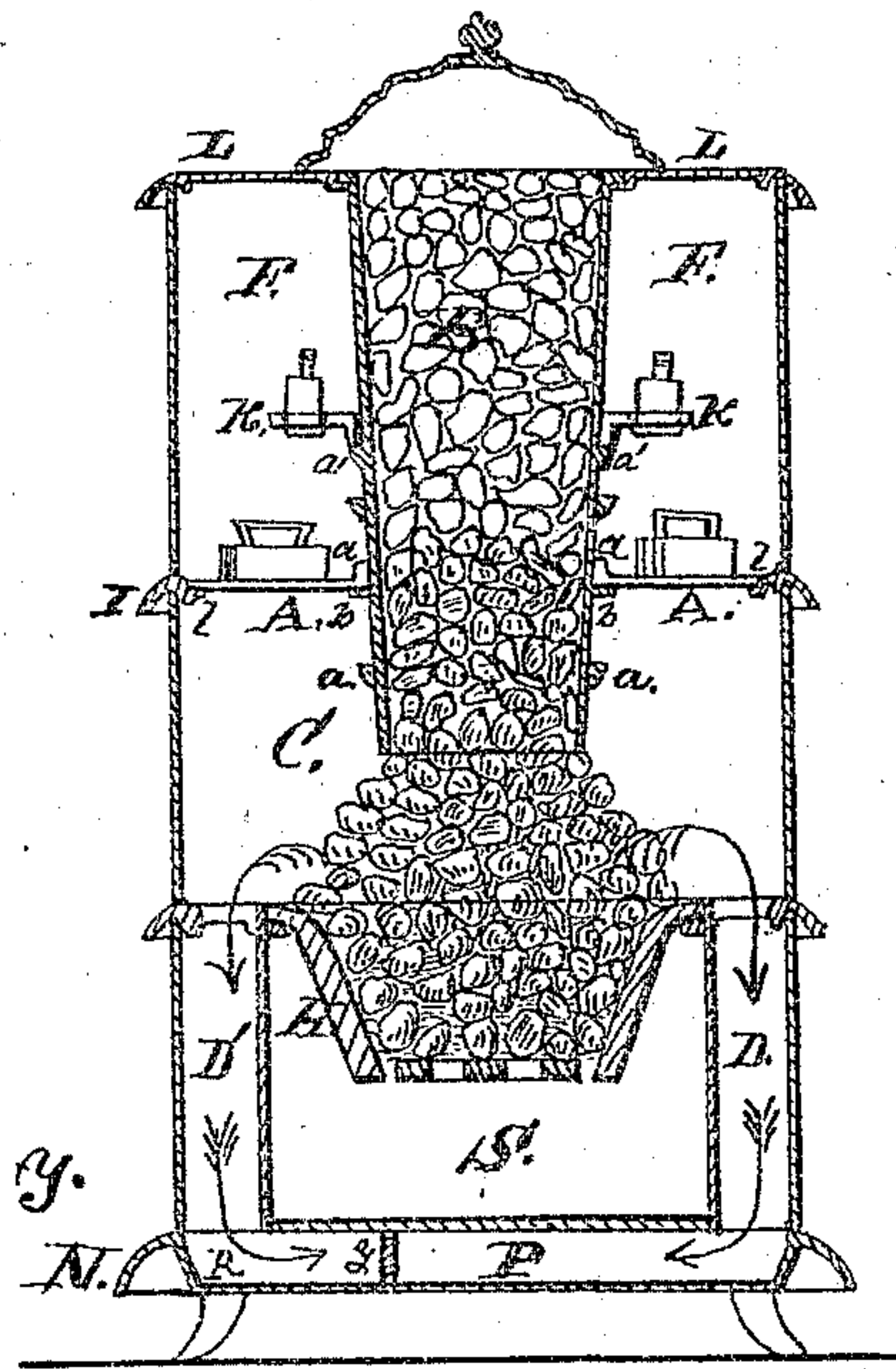


Fig. 2.

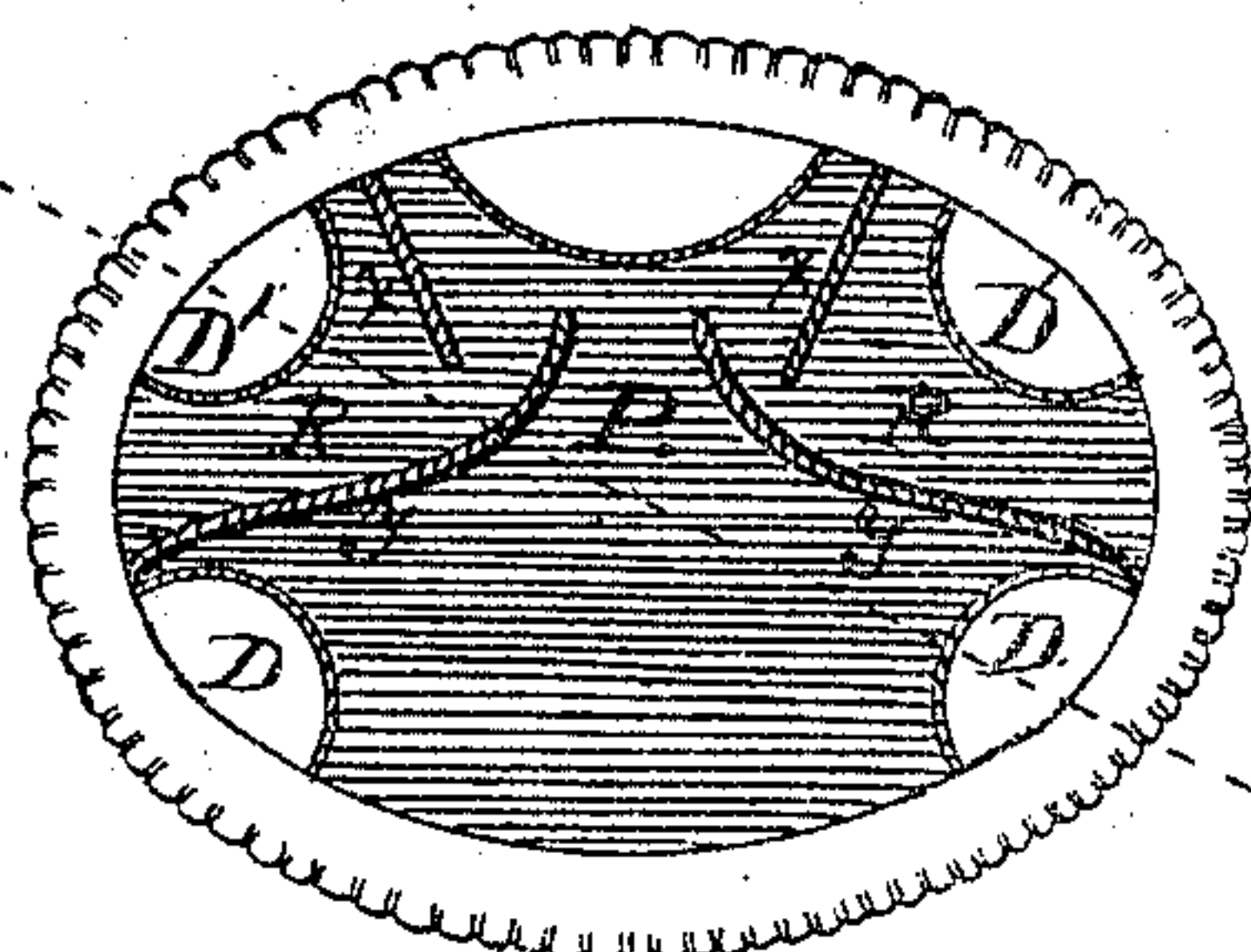
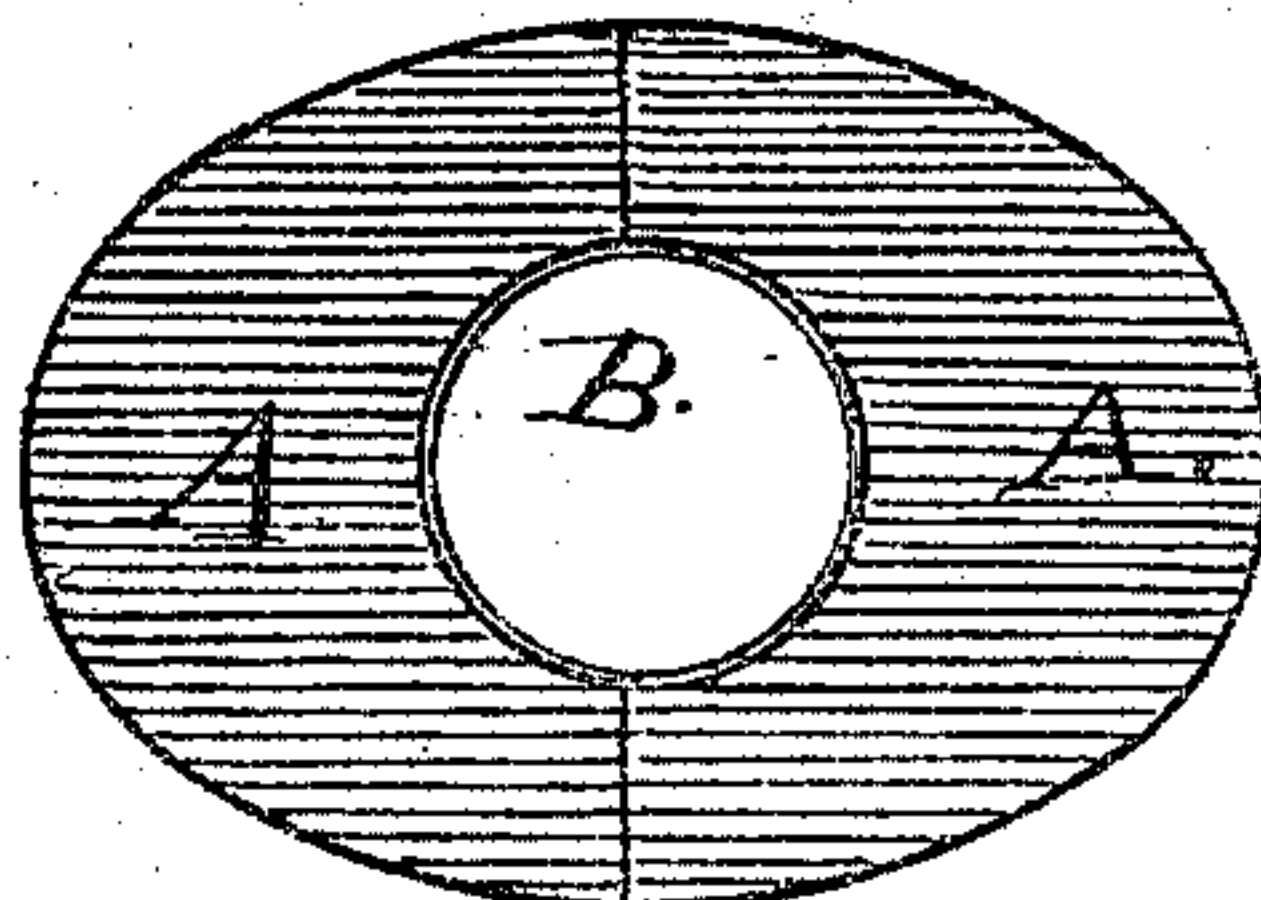


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM DOYLE, OF ALBANY, NEW YORK.

IMPROVEMENT IN BASE-BURNING STOVES.

Specification forming part of Letters Patent No. 120,811, dated November 14, 1871.

To all whom it may concern:

Be it known that I, WILLIAM DOYLE, of Albany, in the county of Albany and State of New York, have invented certain Improvements, new and useful, in Base-Burning Stoves, for Tailors' and Hatters' use, of which the following is a specification:

The first part of my invention relates to the interposition of a detachable solid plate across the upper section or combustion-chamber of a base-burning stove in such a manner as to form an additional heating-chamber for tailors' and hatters' use, as will be hereinafter more fully explained. The second part of my invention relates to the combination of the subject of the first part of my invention with a base-burning stove having a peculiar arrangement of flues in the base of the same. The third part of my invention relates to the arrangement and combination of a revolving shelf with the reservoir of a base-burning stove, and within an auxiliary heating-chamber surrounding the same. The fourth part of my invention relates to the combination of a series of perforated or open-work shelves within the combustion-chamber of a base-burning stove, in combination with one or more doors in the upper section of the stove. The fifth part of my invention relates to a peculiar construction of open work or lattice shelves, thereby adapting them to tailors' use.

In the accompanying drawing, Figure 1 is a perspective view of a stove embodying my invention. Fig. 2 is a plan of the flues in the base of the stove. Fig. 3 is a central vertical section of Fig. 1 on a plane running from the front to the rear of the stove. Fig. 4 is a central vertical section taken on the plane of a line, *y y*, in Fig. 2. Fig. 5 is a plan of the detachable interposed solid plate of the combustion-chamber. Fig. 6 is a central vertical section of a stove having three shelves of open or lattice-work, and sunken solid recesses for the reception of irons to be heated, the solid plate A being removed. Fig. 7 is a top view of the circular revolving shelf K.

A is a metal plate, of the shape and size of combustion-chamber C, made in two parts, and surrounding the reservoir B when in its place in the stove. Said interposed plate A when in the stove cuts off all the upward passage of the products of combustion, and thus forms an aux-

iliary heating-chamber, F, above it. Plate A is constructed of two or more pieces, so that it can easily be removed whenever necessary. It is also solid or without perforations, fitting closely around reservoir B, its outer edge resting upon ring I, as shown in Figs. 3 and 4. B is a fuel reservoir suspended from the top plate L. It has projections *a a'* and *b* upon its outer surface, for the support of shelves J and K and plate A, as shown in Figs. 3, 4, and 6. C is the combustion-chamber of the stove, extending from the fire-pot H to the top plate L, except when intercepted by solid plate A, as shown in Figs. 3 and 4. The direct draught or cross-pipe X is placed near the top of the middle or illuminated section of the stove. D D' are descending draught-flues connecting the combustion-chamber C with the double-base N of the stove. Here the two front flues D D merge into one flue, P, and the two back flues D' D' connect with side base flues R R, as shown in Figs. 2 and 4. At the back part of the ash-pit S the exit-flue T is carried inward, so as to connect with the base flues, as shown in Fig. 3. P is the extension-flue, which is formed by flue-strips *y y* extending beyond the ends of flue-strips *x x* so as to carry flue P into exit-flue E of the base for the purpose of insuring a steady draught through front descending-flues D D, and consequently to aid greatly the burning of the fire and the diffusion of heat therefrom. The upper section of the stove is provided with one or more doors, *r r* and *s*, for the purpose of introducing tailors' or hatters' irons to be heated, as shown in Figs. 1, 3, and 4.

It will be seen from the above that plate A may be removed at any time so as to heat more rapidly any articles upon the upper shelf K; also that a perforated shelf, J, may then be put near the bottom of the reservoir, close to the fire, as shown in Fig. 6.

Shelves K and J are not only perforated or made of lattice or open-work, but they are also constructed with sunken recesses of solid iron of the shape and size of tailors' irons. Said recesses *g g* will protect the face of the irons from the direct and destructive action of the carbonic-acid gas evolved during the burning of the fire. Solid places *g g* need not necessarily be sunken. They may, instead, be surrounded with a low rim to keep the irons in place.

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

1. The interposition of a detachable solid plate, A, within the combustion-chamber of a base-burning or fuel-reservoir stove, in combination with open or lattice-work shelves K or J, as and for the purpose herein shown.

2. The combination and arrangement of detachable solid plate A with fuel-reservoir B, and one or more doors *r r* or *s* in a base-burning stove, having flues D D and D' D', and an extension-flue, P, in the manner and for the purpose herein described.

3. The combination of revolving shelf K with

reservoir B and heating-chamber F, formed by the interposition of detachable solid plate A, as herein set forth.

4. The combination of lattice-work shelves K or J within the combustion-chamber C of a base-burning stove with doors *r r* or *s*, and with or without the interposition of solid plate A, as herein shown and described.

5. The construction of open work or lattice-shelves K and J with solid places *g g* for the protection of irons, as herein set forth.

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(154)