

No. 620,324.

Patented Feb. 28, 1899.

J. HOVSEPIAN.
OVEN SHELF.

(Application filed Dec. 19, 1898.)

(No Model.)

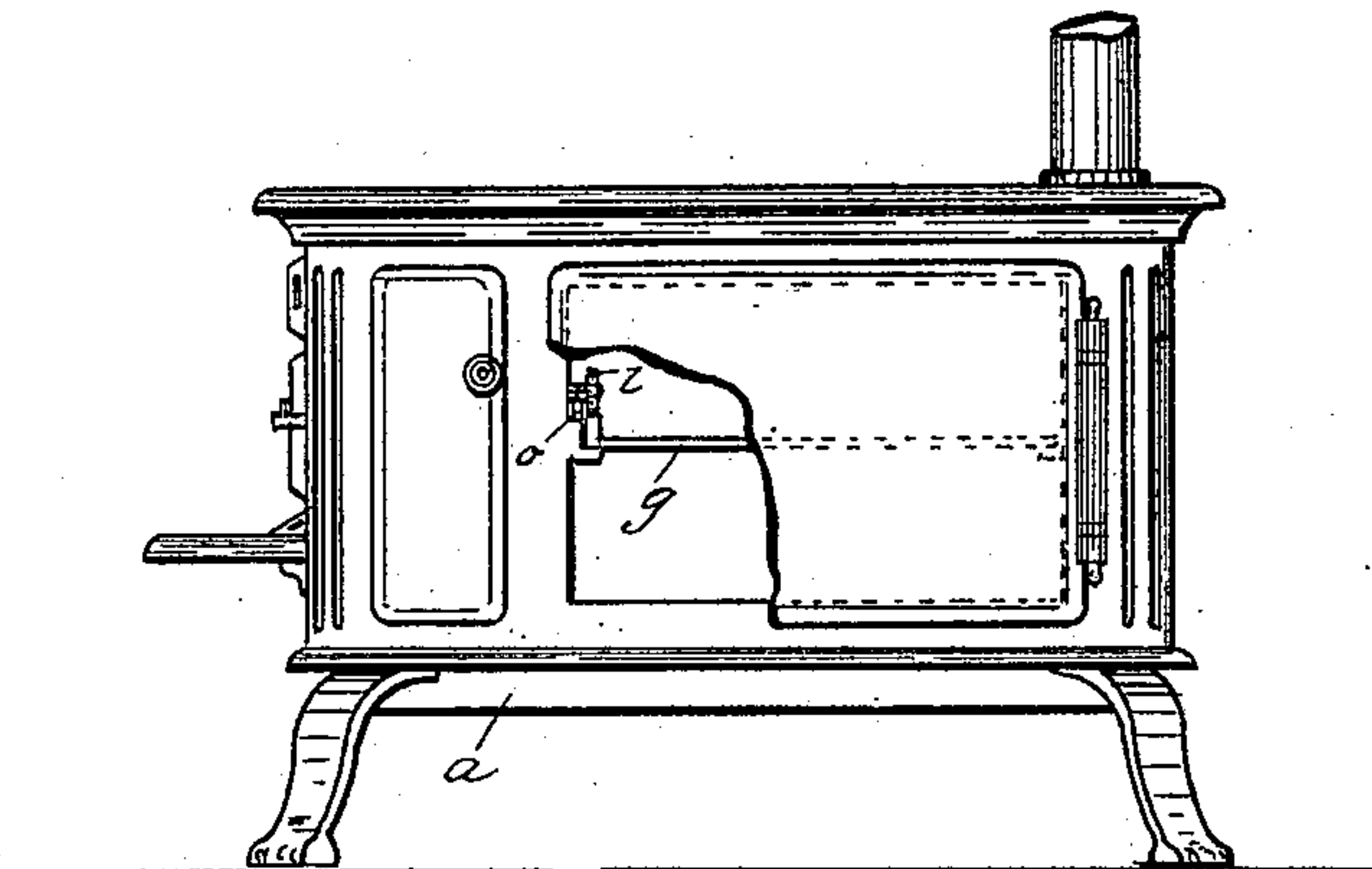


Fig. 1.

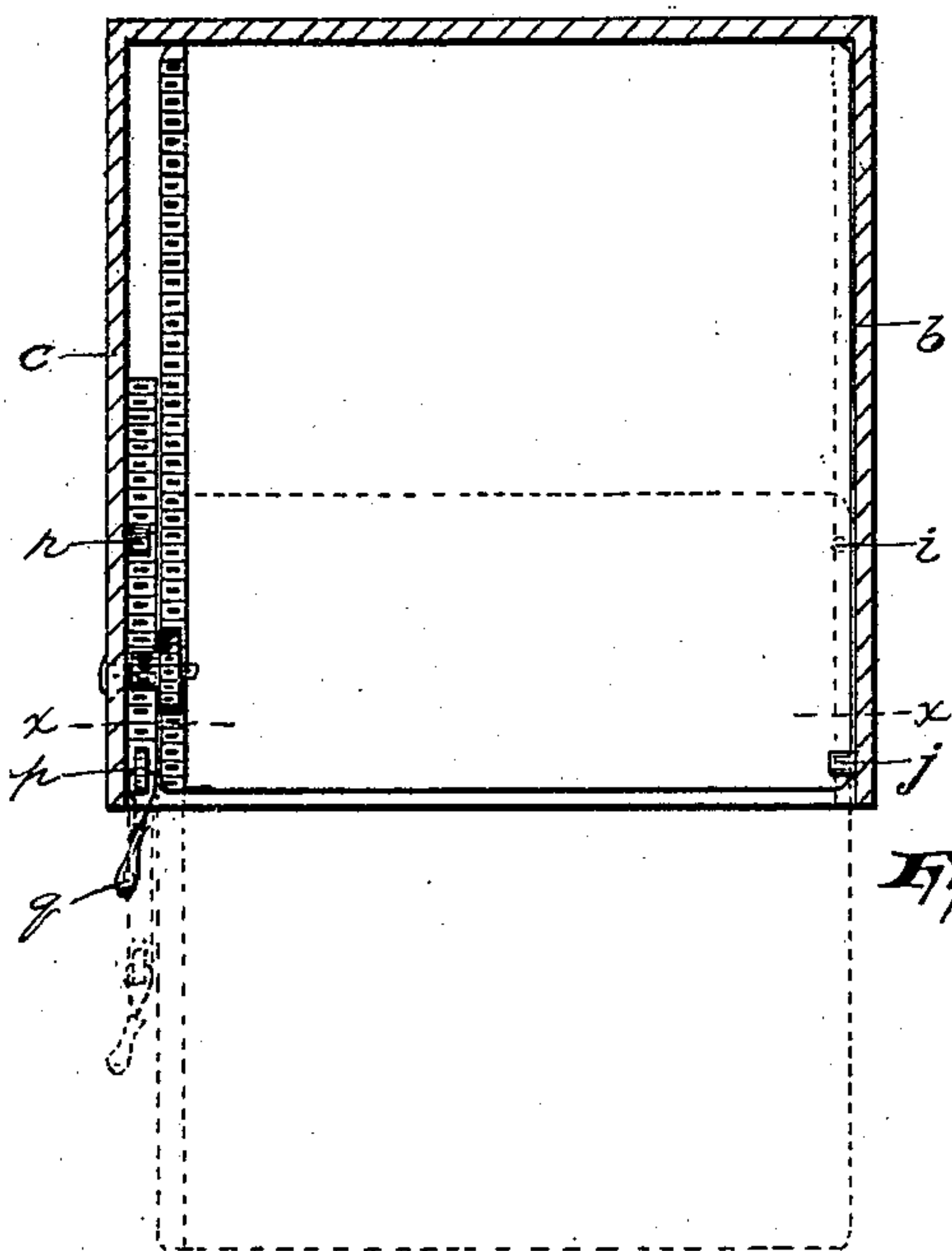


Fig. 2.

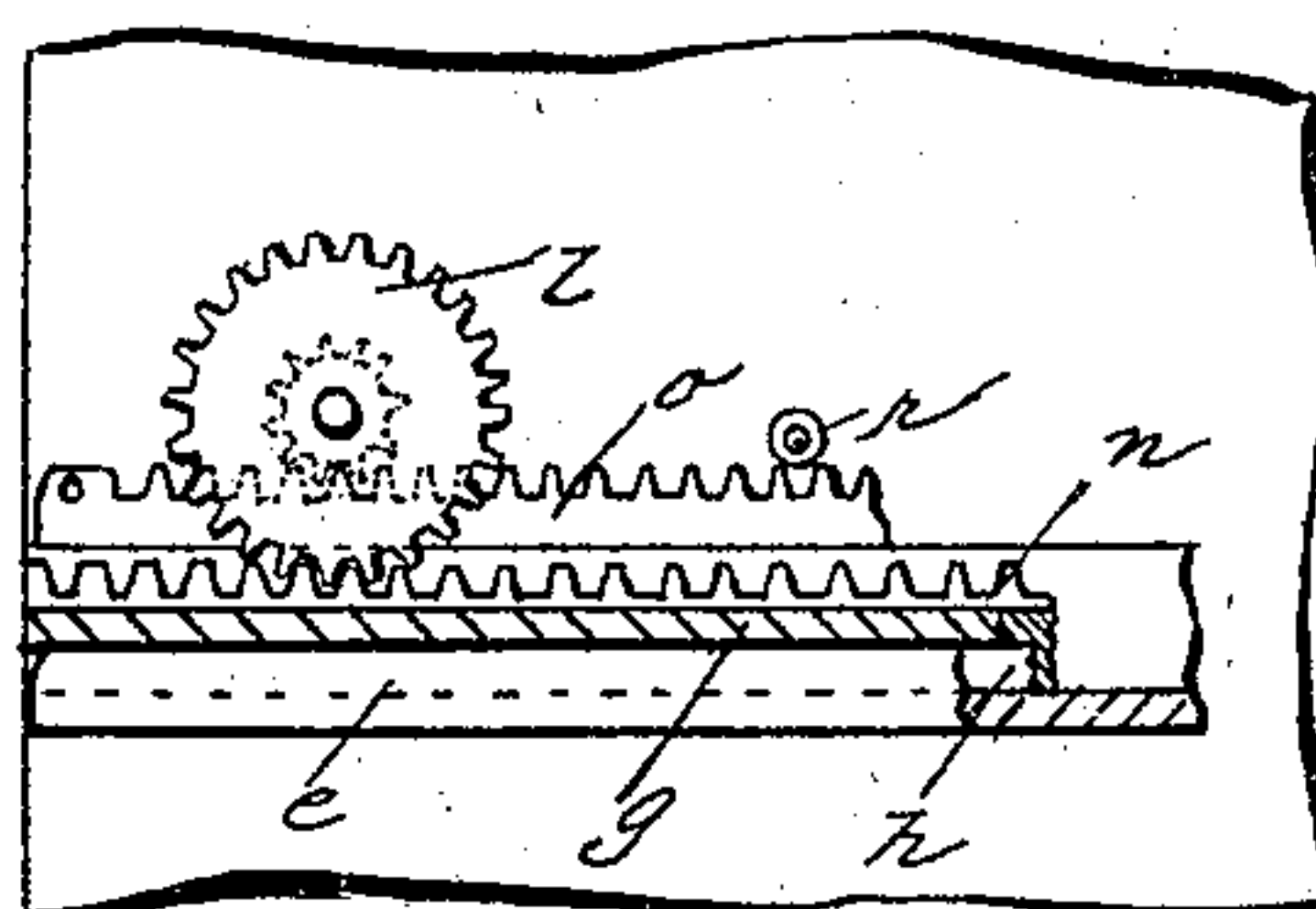


Fig. 4.

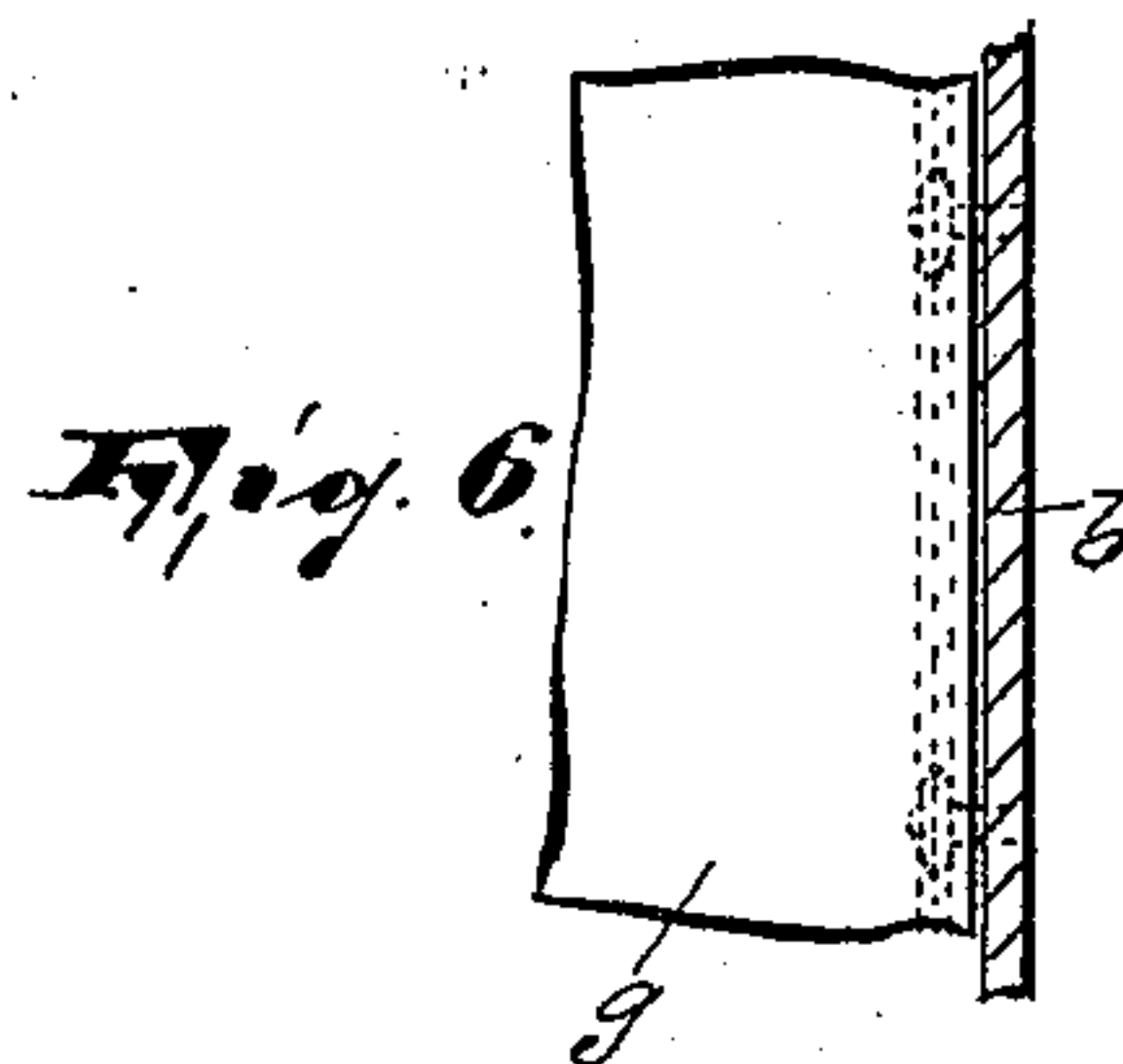


Fig. 6.

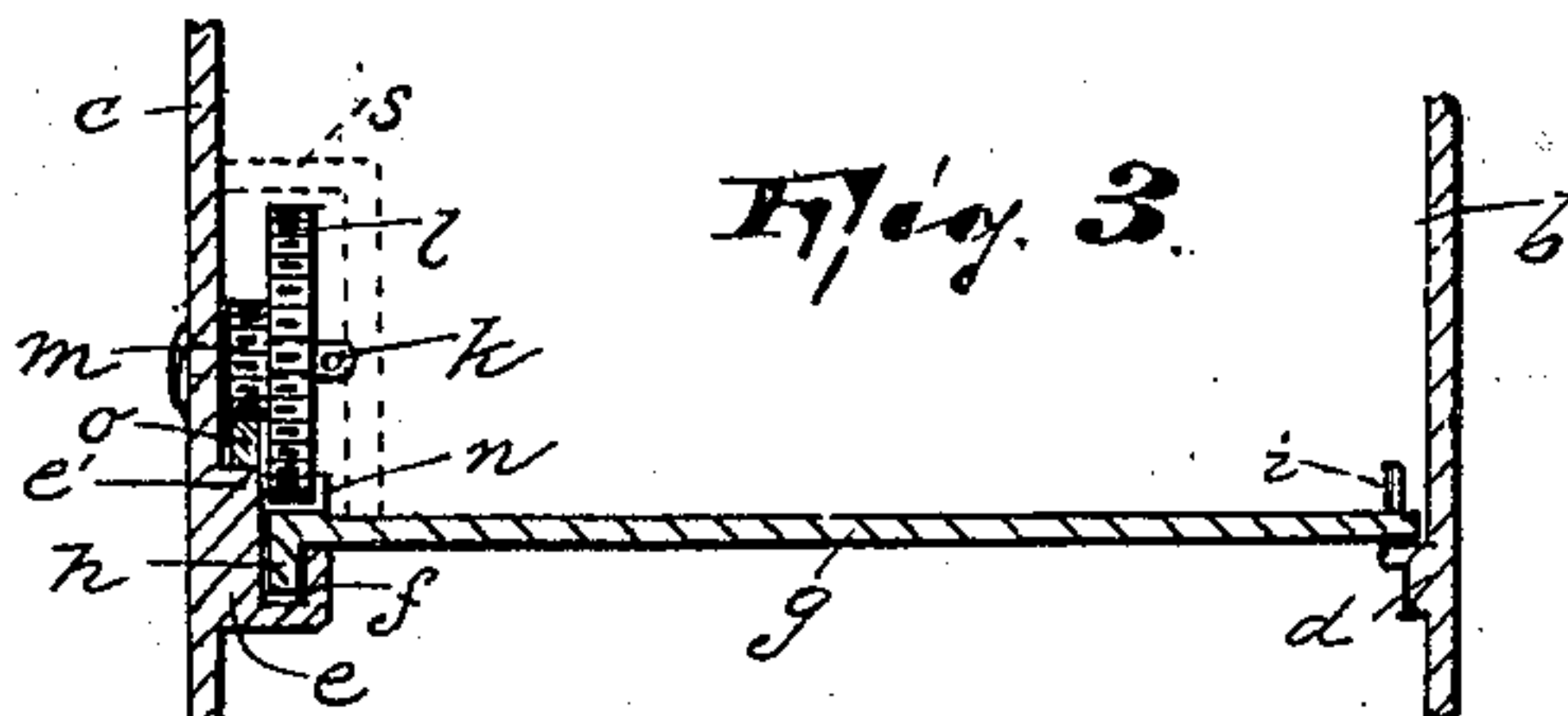


Fig. 3.

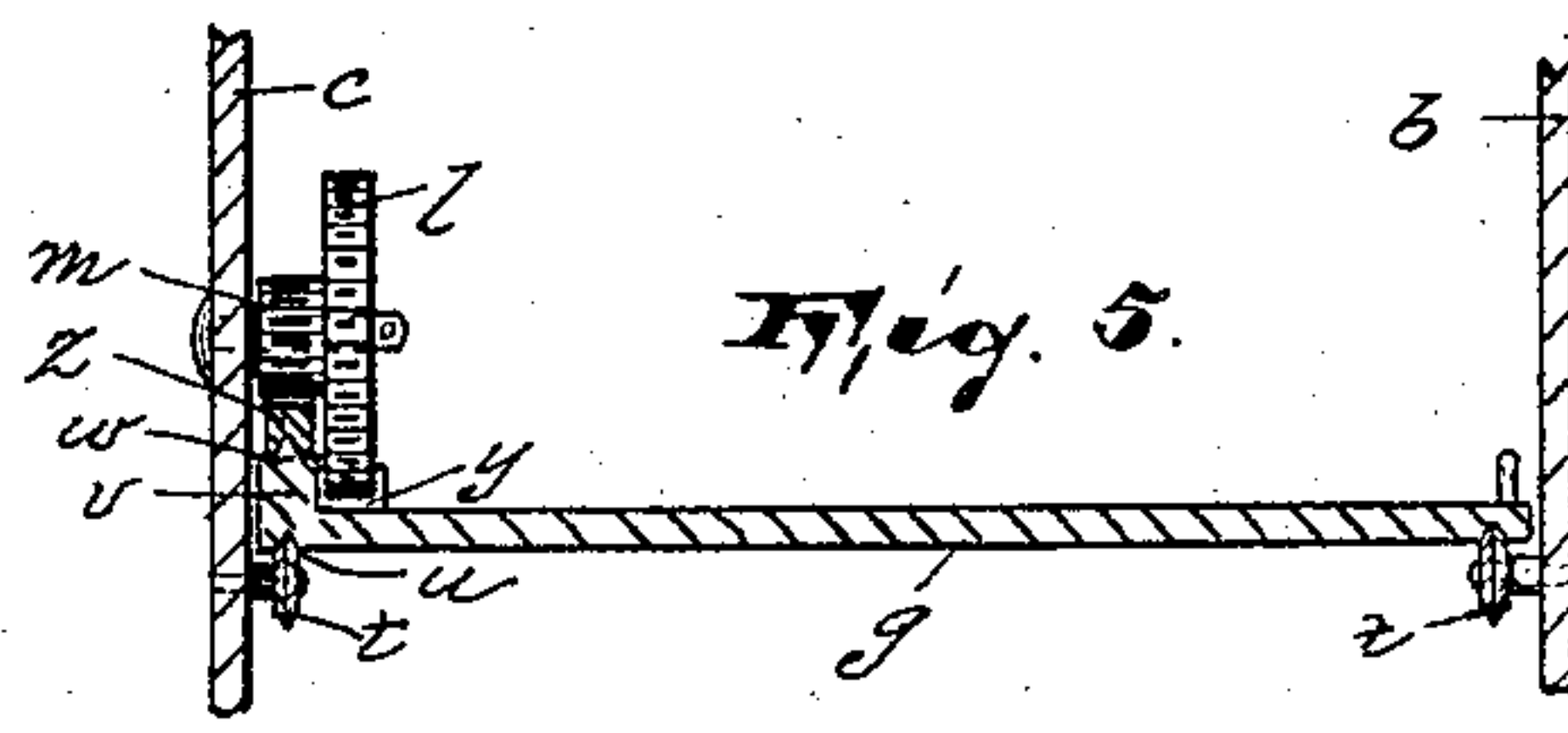


Fig. 5.

WITNESSES:

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UNITED STATES PATENT OFFICE.

JOSEPH HOVSEPIAN, OF PATERSON, NEW JERSEY, ASSIGNOR OF ONE-HALF
TO THOMAS ASLANIAN, OF SAME PLACE.

OVEN-SHELF.

SPECIFICATION forming part of Letters Patent No. 620,324, dated February 28, 1899.

Application filed December 19, 1898. Serial No. 699,643. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HOVSEPIAN, a citizen of the United States, residing in Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Oven-Shelves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as 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 letters of reference marked thereon, which form a part of this specification.

My invention relates to sliding shelves, and particularly to sliding shelves for stove-ovens; and the object of my invention is to provide operating means whereby a shelf of this nature can be reciprocated for a considerable distance with but comparatively little exertion of the operator and the minimum of movement of its operating device.

The invention consists in the improved sliding shelf and its operating means and in the combination and arrangement of the various parts, substantially as will be hereinafter pointed out, and finally embodied in the clauses of the claim.

In the accompanying drawings, Figure 1 is a view of a stove provided with my improved shelf and an operating device therefor arranged in its oven, a portion of the oven-door of said stove being broken away. Fig. 2 is an enlarged detail and horizontal sectional view of the oven portion of the stove, showing my improved shelf and its operating means arranged therein. Fig. 3 is a vertical sectional view of what is shown in Fig. 2, but taken on the line *x x* of said figure. Fig. 4 is a view in inside elevation of my invention as shown in Fig. 2, portions thereof being also shown in section. Fig. 5 is a vertical sectional view of a modified form of my invention, and Fig. 6 is a top plan view of a portion of the modified form of my invention as shown in Fig. 5.

In said drawings the stove *a* is provided upon the inner faces or surfaces of the side walls *b* and *c* of its oven with guides *d e*, respectively, the latter of which is somewhat larger than the other and is provided with a

longitudinal channel or groove *f* in its upper face and an integral raised portion *e'* adjacent the face of the oven-wall.

g designates the shelf of the oven, which is provided along the edge adjacent and resting upon the guide *e* with a downwardly-extending flange or rib *h*, engaging said channel *f*. Adjacent the opposite edge of said shelf is a pin *i*, which may be removable, if desired, and which is adapted to engage a lug *j*, projecting from the wall of the oven, and acts to prevent the shelf from being drawn too far out of the oven. Journaled upon the pin *k*, which projects from the wall *c* of the oven, is a pair of pinions *l m*, one being larger than and spaced from the wall by the other and being disposed above the adjacent edge portion of the shelf, engaging a rack *n*, that is formed upon said shelf and extends longitudinally thereof above the flange *h*.

Between the pinion *m* and the raised portion *e'* of the guide *e* is a reciprocating rack-bar *o*, whose teeth are in engagement with the teeth of said pinion. This rack-bar is provided with a lug *p* at its outer end, to which a handle *q* of any suitable form is secured.

r is a lug projecting from the inner face of the side wall *c* above said rack-bar and adapted to prevent the latter from dropping downwardly when it projects far enough out of the oven so that the action of gravity will tend to tilt it.

It should be remarked that, if desired, a casing or box *s* may be formed upon the side wall *c* and about the pinions, so as not only to protect them, but also to afford a support for the free end of their journaling-pin *k* and as a means for steadying the shelf *g*, especially when it is projecting from the oven.

In the modification shown in Figs. 5 and 6 the shelf is mounted upon a series of beveled rollers *t*, suitably journaled upon the side walls *b* and *c* of the oven and engaging with their beveled peripheries V-shaped grooves *u*, formed in the end side of said shelf. The shelf is provided in this instance along the edge adjacent the pinions with an upwardly-extending flange *v*, having a longitudinal rib *w* upon its upper face and a rack *y* arranged alongside of said flange. The rack *y* is adapt-

ed to be engaged by the teeth of the pinion l , and the pinion n is adapted to engage the teeth of a rack-bar z , which slides upon the flange v , and is provided with a V-shaped groove that receives the rib w on said flange. By virtue of this arrangement the thickness of the rack-bar may be considerably less than the space between the pinion l and the side wall c of the oven, the result being a reduction of bearing-surface.

It will be seen that owing to the difference in the sizes of the two pinions a differential movement in the shelf and its rack-bar is obviated. Thus a slight movement of the latter will effect considerable movement of the former. If the box or covering s is not provided, the pinion l will suffice to prevent the dropping of the forward end of the shelf when the latter is in its extended position—that is to say, projecting out of the oven.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a suitable support, of a shelf adapted to be reciprocated thereon and provided with a rack, a pair of rigidly-connected pinions concentrically journaled in said support, one of said pinions being larger than the other and engaging said rack and a suitably-supported reciprocating rack-bar engaging the teeth of the other of said pinions, substantially as described.

2. In a stove, the combination, of an oven-shelf therefor adapted to be reciprocated and provided with a rack, a pair of rigidly-connected pinions concentrically journaled in the oven-wall, the one being larger than the other and engaging said rack, guides projecting from the walls and sustaining said shelf, and a rack-bar suitably supported above one of said guides and engaging the smaller pinion, substantially as described.

3. In a stove, the combination of an oven-shelf therefor adapted to be reciprocated and provided with a rack upon its upper face and along one of its side edges, a pair of rigidly-connected pinions concentrically journaled in the oven-wall above said shelf, the one being larger than the other and engaging said rack, guides projecting from the oven-walls and sustaining said shelf, and a rack-bar suitably supported above one of said guides and engaging the other pinion, the smaller pinion and the rack-bar being disposed between the larger pinion and the adjacent oven-wall, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of December, 1898.

JOSEPH HOVSEPIAN.

Witnesses:

ALFRED GARTNER,
JOHN W. STEWARD.