

J. L. GEROW.

Cooking Stove.

No. 6,070.

Patented Jan'y 30, 1849.

Fig. 1

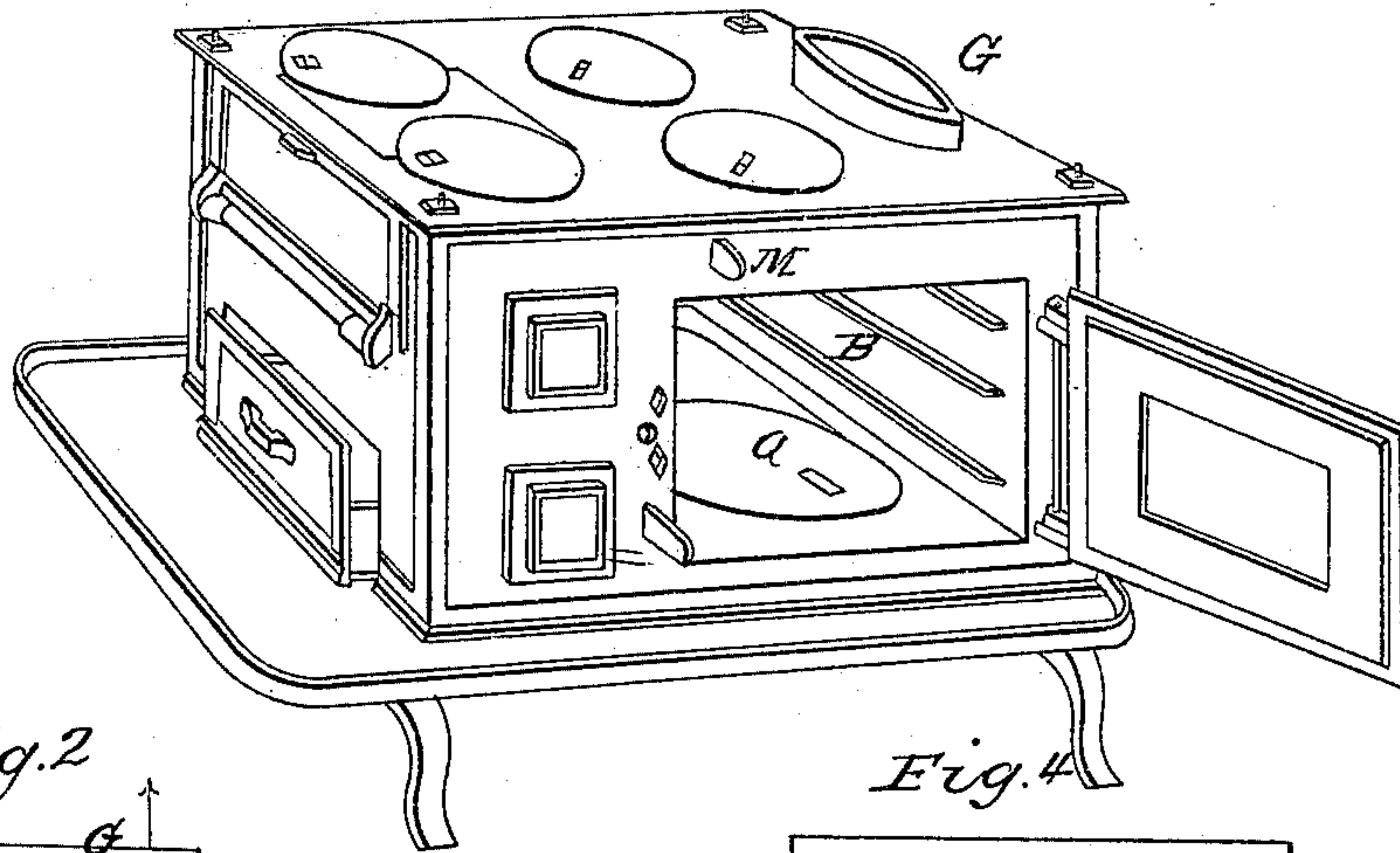


Fig. 2

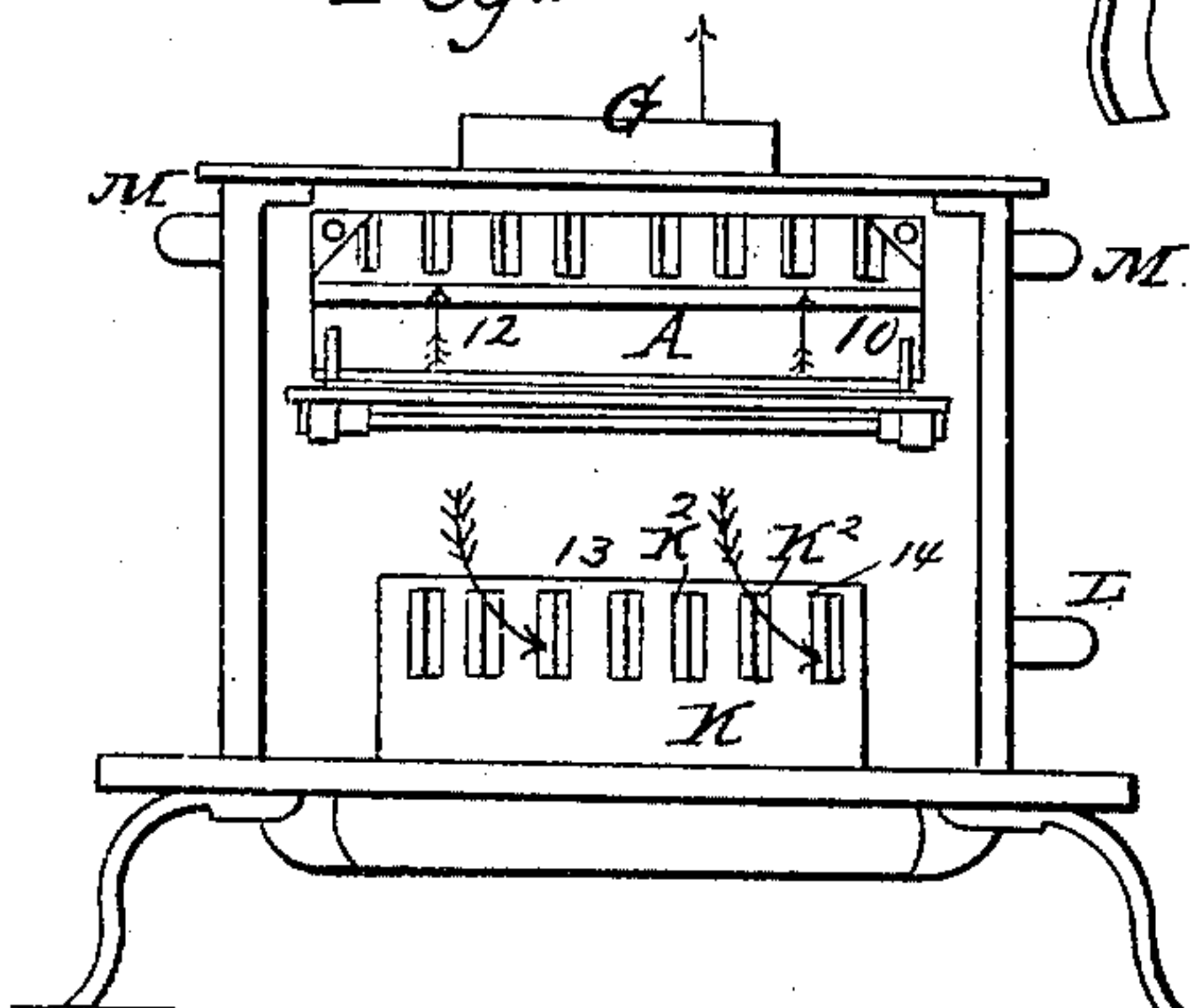


Fig. 4

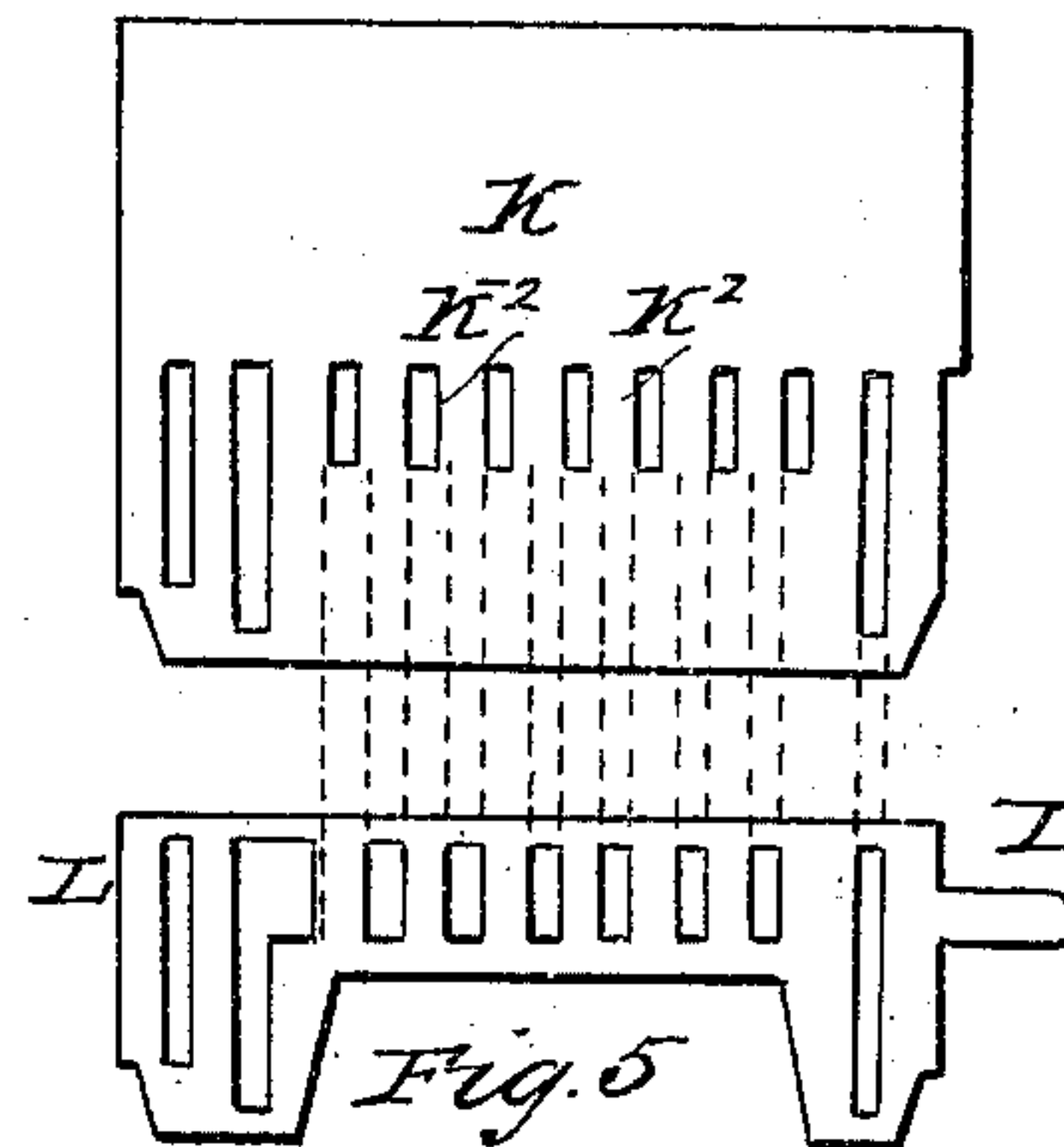
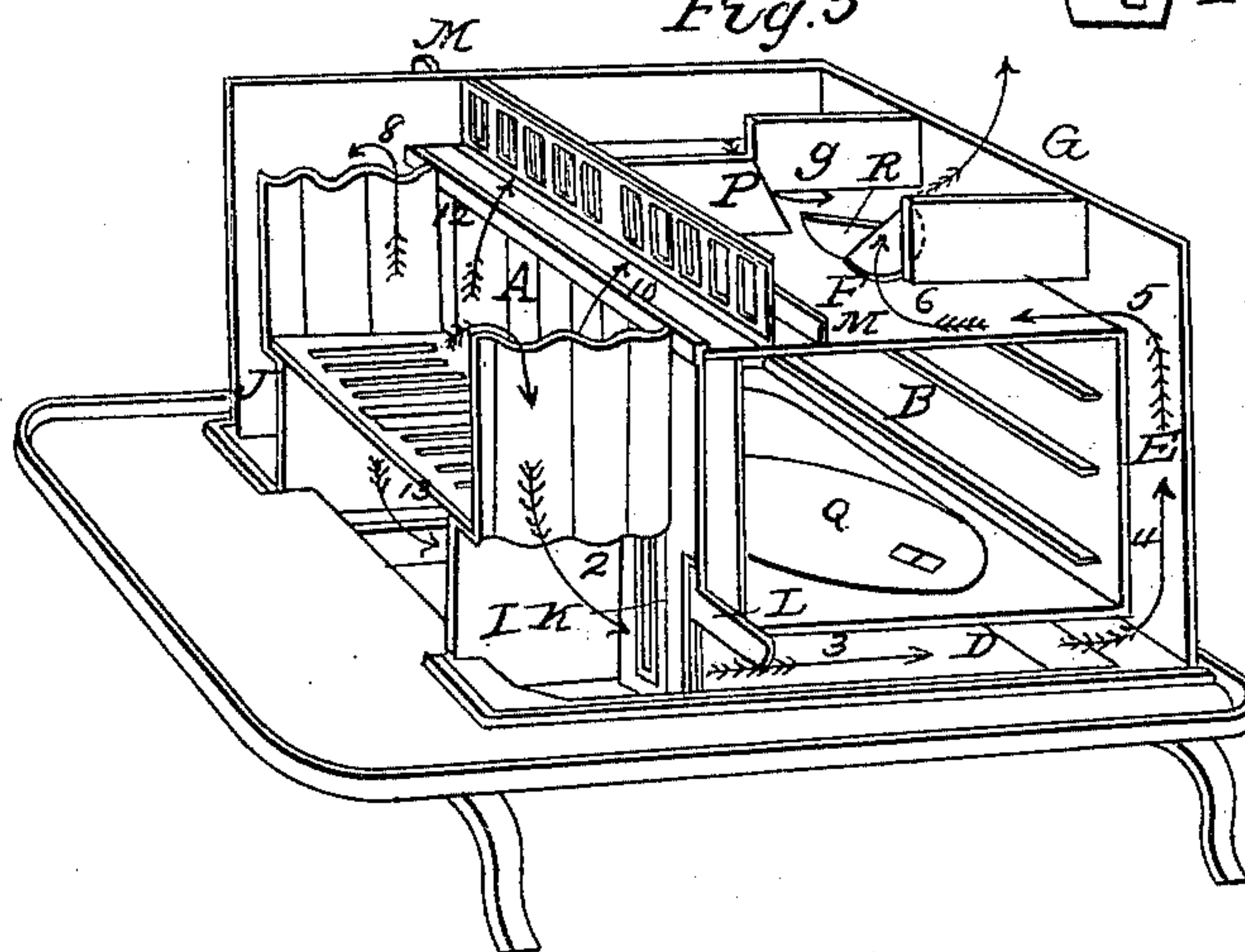


Fig. 3



UNITED STATES PATENT OFFICE.

JNO. L. GEROW, OF MARLBORO, NEW YORK.

COOKING-STOVE.

Specification of Letters Patent No. 6,070, dated January 30, 1849.

To all whom it may concern:

Be it known that I, JOHN L. GEROW, of Marlboro, in the county of Ulster and State of New York, have invented a new and useful Improvement in the Cook-Stove, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a perspective view of the stove showing one of the oven doors open and the ash draw drawn partly out to admit air to the grate. Fig. 2 is an elevation of the front of the stove, the front door of the fire chamber and the ash draw being removed for the purpose of showing the draft holes above the level of the grate, which, when open, cause the draft to pass over the oven; and the draft holes below the bottom of the grate for turning the draft down through the grate and under the oven by closing the upper and opening the lower register, by which the kindling may be effected from the top of the coal instead of the bottom. Fig. 3 is a perspective view showing the interior of the stove, the top, side and front plate being removed for the purpose of showing the interior. Fig. 4 is a plan of a plate K arranged across the stove at the back of the fire chamber extending from the top thereof to the bottom plate of the stove having a number of oblong slits in the same which are below the level of the grate through which the draft is made to pass when kindling from above. Fig. 5 is a plan of the register plate that moves back and forth against the transverse plate represented in Figs. 3 and 4 for the purpose of opening and closing the openings therein when changing the direction of the draft downward through and under the grate.

Similar letters in the several figures refer to corresponding parts.

The arrows numbered from one to nine inclusive indicate the direction of the draft when the lower register is brought to the position represented in Fig. 3 and in the relationship to the plate represented in Fig. 4, the side openings being open and those under the grate closed and the registers above the oven being closed, the draft being down through the flues at the end of the fire chamber, under, back of, and over the oven and into the funnel. The arrows 13 and 14 show the direction of the draft when the lower register is moved to the right as far

as it will go and the upper registers are closed, the draft being cut off from the end flues and turned down through and under the grate and oven and up behind the same to the smoke pipe. The arrows 10 and 12 show the direction of the draft when the upper registers are open, being over the oven and direct to the smoke pipe.

The principal parts of this stove are made in the usual manner, such as the fire chamber A, the oven B, the flues D, E, F, and smoke pipe G.

My improvement consists in forming two diving flues I, J, at the ends of the fire chamber which communicate with the broad flue D beneath the oven (extending the whole breadth of the stove) and also communicating with the back and top flues E, F. Another improvement consists in making a number of rectangular openings in the vertical transverse plate K arranged between the fire chamber and the oven through which the draft is made to pass from the aforesaid end diving flues to the broad flue beneath the oven. And also down through the grate and through the middle openings of said plate by moving the lower register plate L to the right or left. The drawing (Figs. 1, 3 and 4) represent this register plate as moved to the left, which opens the two end drafts and closes the drafts beneath the grate. Fig. 2 represents the register plate L as moved to the right, the end flues being closed and the middle flue below the grate open.

The register plate in the front part of the top flue is made in two parts M M meeting at the center of the stove. By drawing the plate on the right of the center to the right, leaving the other plate closed the draft will be under the two right boiler holes. In order to make the draft pass under the left boiler holes at the same time the left register plate must be drawn to the left. In Fig. 3 this plate is represented as being partly opened and the other closed.

The vertical division plate P in the top flue is for the purpose of preventing the two drafts (when the two upper register plates are drawn out) from uniting until they are about to enter the smoke pipe, thus keeping the drafts under the boilers.

The circular cover Q represented at Q in Figs. 1 and 3 closes an opening in the bottom plate of the oven in which culinary op-

eration may be performed, the fumes passing off through the opening R in the top plate of the oven into the smoke pipe.

The ends and back plate of the fire chamber are made serpentine to allow them to expand and contract without breaking.

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

1. The combination and arrangement of the two end flues I and J with the broad flue D beneath the oven and the flues E and F at the back and top thereof.

2. I claim the combination and arrangement of the flues K² beneath the grate with

the broad flue D below the oven, by which the draft may be made to pass down through the grate and under the same in order to kindle from the top, by closing the upper register plates M and the side flues I and J and opening the central flues K² as afore-
said.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

JOHN L. GEROW.

Witnesses:

WM. P. ELLIOT,
A. E. H. JOHNSON.