

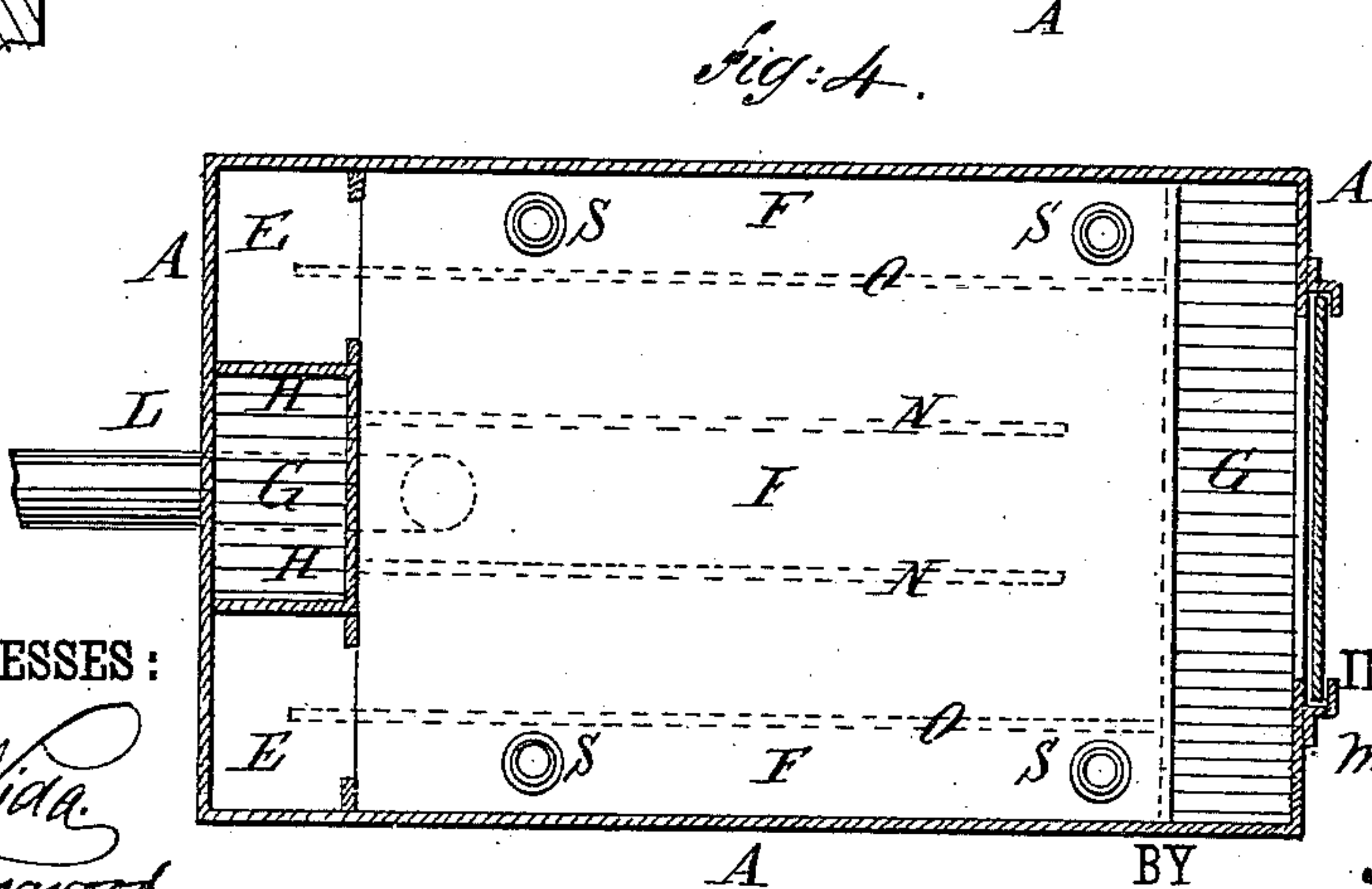
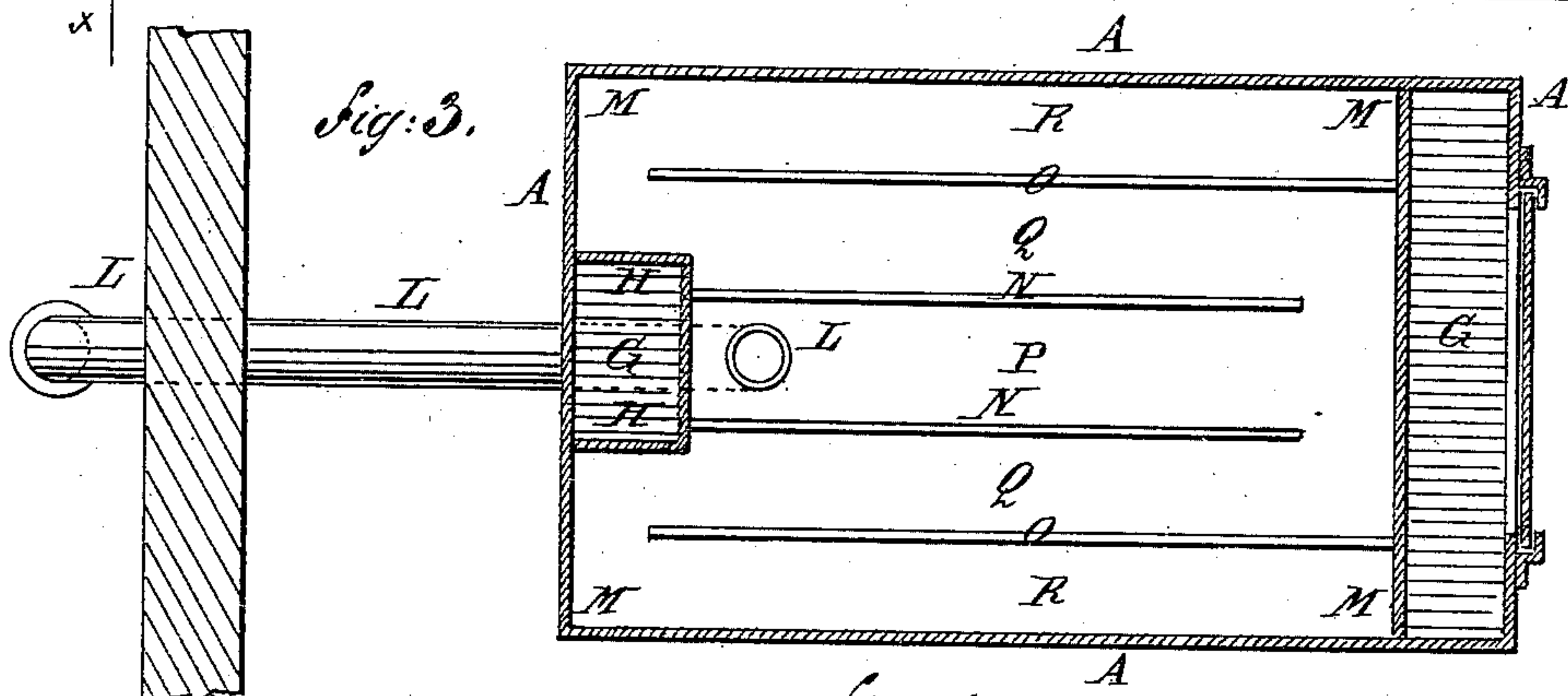
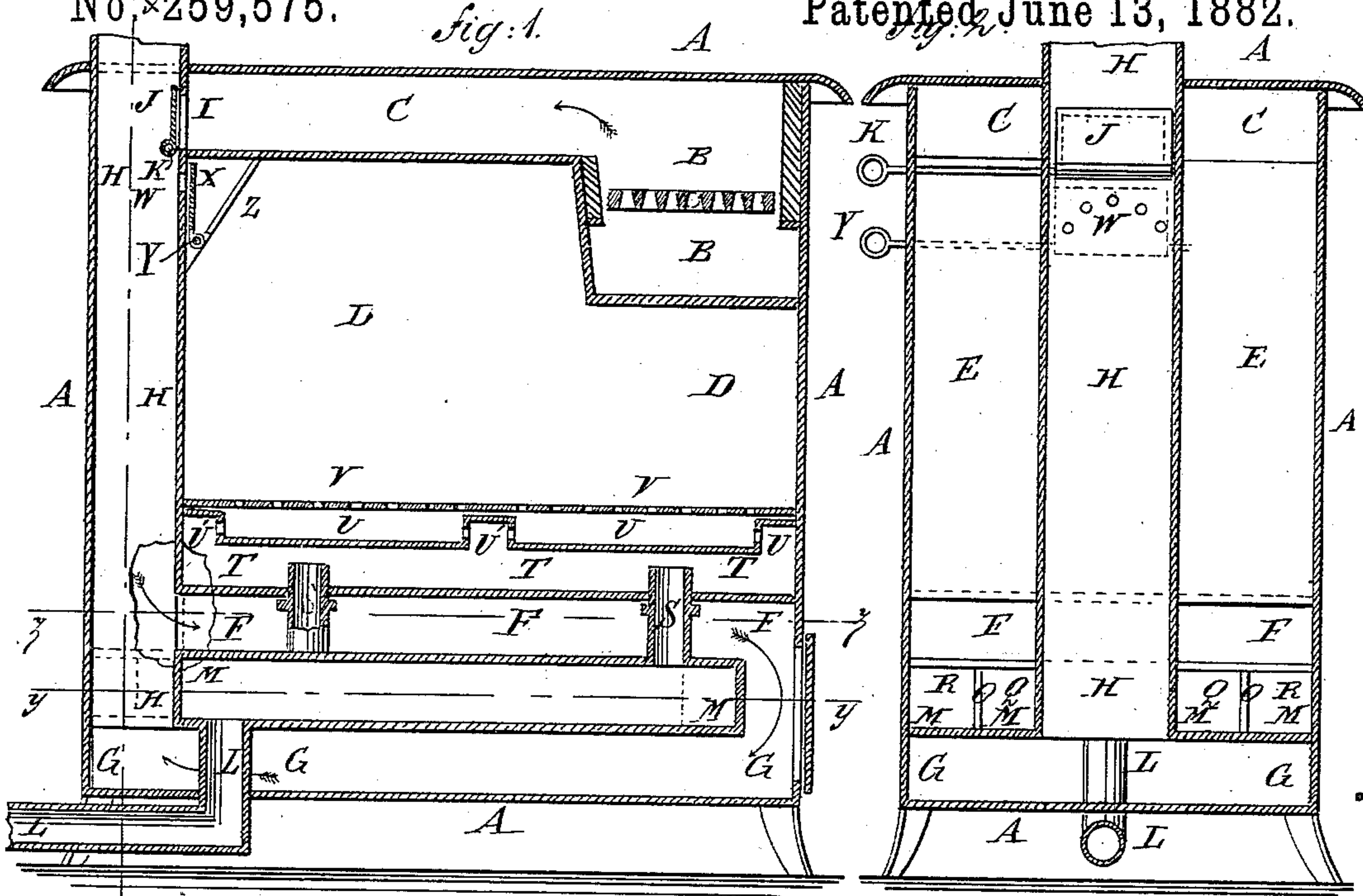
(Model.)

M. A. NICHOLSON.

COOKING STOVE.

No. 259,575.

Patented June 13, 1882.



WITNESSES:

*Chas. Nida.*  
*B. F. Underwood.*

INVENTOR:

*M. A. Nicholson*

*Munn Co*

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

MORENUS A. NICHOLSON, OF RICHWOOD, OHIO, ASSIGNOR OF ONE-FOURTH  
TO FRANCIS M. DICKS, OF SAME PLACE.

## COOKING-STOVE.

SPECIFICATION forming part of Letters Patent No. 259,575, dated June 13, 1882.

Application filed March 11, 1882. (Model.)

*To all whom it may concern:*

Be it known that I, MORENUS A. NICHOLSON, of Richwood, in the county of Union and State of Ohio, have invented a new and useful  
5 Improvement in Cooking Stoves and Ranges, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification,  
10 in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of my improvement. Fig. 2 is a sectional rear elevation of the same, taken through the line *xx*,  
15 Fig. 1. Fig. 3 is a sectional plan view of the same, taken through the line *yy*, Fig. 1. Fig. 4 is a sectional plan view of the same, taken through the line *zz*, Fig. 1.

The object of this invention is to facilitate  
20 the operation of cooking in the ovens of cooking stoves and ranges and lessen the time required therefor.

A represents a cooking stove or range. B is the fire-box, from which the smoke and other  
25 products of combustion pass through the space C between the top plate of the stove A and the top plate of the oven D, and enter and pass down the side flues, E, to the chamber F in the lower part of the stove. At the forward  
30 end of the chamber F the smoke and other products of combustion pass down into and pass back through the chamber G, just above the bottom plate of the stove. At the rear  
35 end of the chamber G the smoke and products of combustion enter the lower end of the center flue, H, from the upper end of which they pass into the smoke pipe or chimney. In the  
40 inner side of the upper part of the center flue, H, is an opening, I, from the space or chamber C. The opening I is closed by a damper, J, attached to a rod, K, which passes out through a side plate of the stove, so that the damper J can be readily opened and closed. When the damper J is opened the smoke and  
45 other products of combustion pass through the opening I into the upper part of the center flue, H, and thence into the smoke-pipe, giving a direct draft when required—as, for instance, when starting a fire. When the  
50 damper J is closed the smoke and other pro-

ducts of combustion pass down through the side flues, E, and reach the smoke-pipe through the chambers F G and center flue, H, as hereinbefore described.

As thus far described there is nothing new 55 in the construction.

L is a cold-air pipe, which passes in through the wall of the building and leads into a chamber, M, formed in the lower part of the stove between the flue-chambers F and G, where the  
60 cold air is heated. The chamber M is divided by partitions N O, forming zigzag passages P Q R. The partitions N extend from the inner wall of the center flue, H, nearly to the front wall of the chamber M, forming a passage, P,  
65 and the partitions O, which are placed midway between the partitions N and the side walls of the stove A, and extend from the front wall of the chamber M nearly to the rear wall, forming passages Q R. The cold-air current from  
70 pipe L enters the chamber M in the rear part of the passage P, and at the forward end of the said chamber M divides and passes around the ends of the partitions O, passes back through the passages Q, passes around the  
75 rear ends of the partitions O, and passes forward through the passages R, so as to be thoroughly heated when it reaches the said passages R. From the passages R four (more or less) pipes, S, pass up through the chamber F  
80 and open into the chamber T formed between the said flue-chamber F and the oven D.

In the top plate, U, of the chamber T, which is also the bottom plate of the oven D, are formed upward offsets U', the sides of which  
85 are finely perforated to allow the heated air to enter the oven D. Upon the tops of the offsets U' rests a finely-perforated plate, V, which serves as a support for the articles being cooked. With this construction the heated air is distributed through all parts of the oven D, so as  
90 to come in contact with the articles being cooked and greatly hasten the operation of cooking. Another advantage of this construction is that the heated air acts first upon the  
95 surfaces of the articles being cooked and prevents the moisture and juices from escaping from the said articles, thus making the said articles more palatable and healthful.

In the upper part of the rear wall of the 100



oven D are formed openings W, leading into the center flue, H, through which the heated air from the said oven can be allowed to escape into the center flue, H, and pass into the stove pipe or chimney. The openings W are closed by a damper, X, attached to a rod, Y, which passes out through a side plate of the stove A, so that the said damper can be readily operated. When the damper X is opened its ends rest upon inclined ledges Z formed upon or attached to the walls of the stove, to serve as stops to prevent the said damper from being opened too far.

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

1. In a cooking stove or range, the combination, with the smoke and distributing chambers, of the partitioned hot-air chamber arranged directly beneath the oven, as and for the purpose described.

2. In a cooking stove or range, the combination, with the oven D and the smoke-chambers F G, of the air-heating chamber M and

the air-distributing chamber T, the inlet-pipe L, the connecting-pipes S, and the plate U, having perforated offsets U', substantially as herein shown and described, whereby cold air is heated and introduced into the oven, as set forth.

3. In a cooking stove or range, the plate U, interposed between the oven D and the air-distributing chamber T, and provided with upward offsets U', having perforated sides, substantially as herein shown and described, whereby the heated air is introduced into the oven, as set forth.

4. In a cooking stove or range, the combination, with the plate U, provided with upward offsets U', having perforated sides, of the perforated plate V, substantially as herein shown and described, whereby the heated air is distributed through the oven, as set forth.

MORENUS ALMANZO NICHOLSON.

Witnesses:

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W. T. JONES.