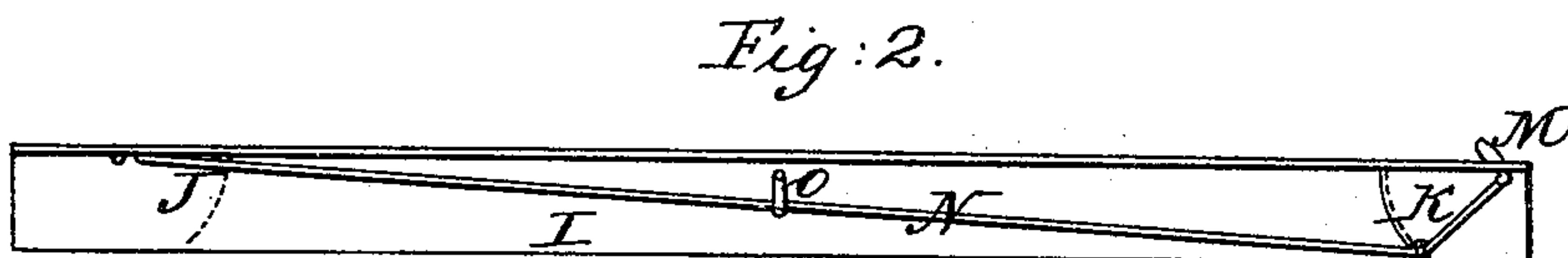
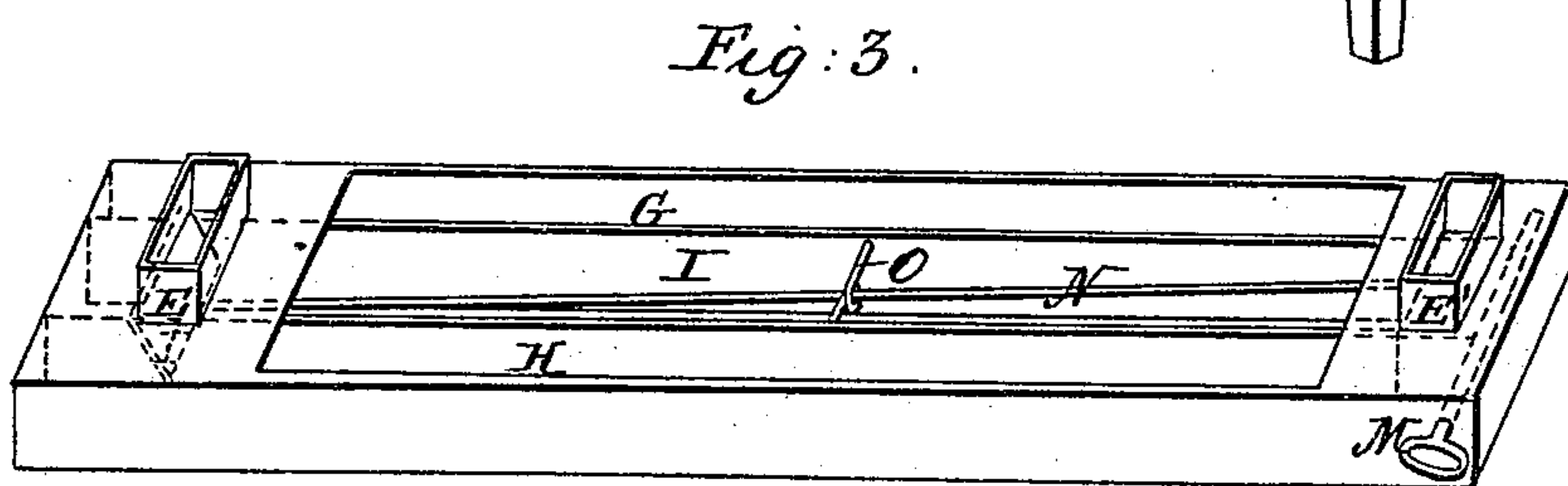
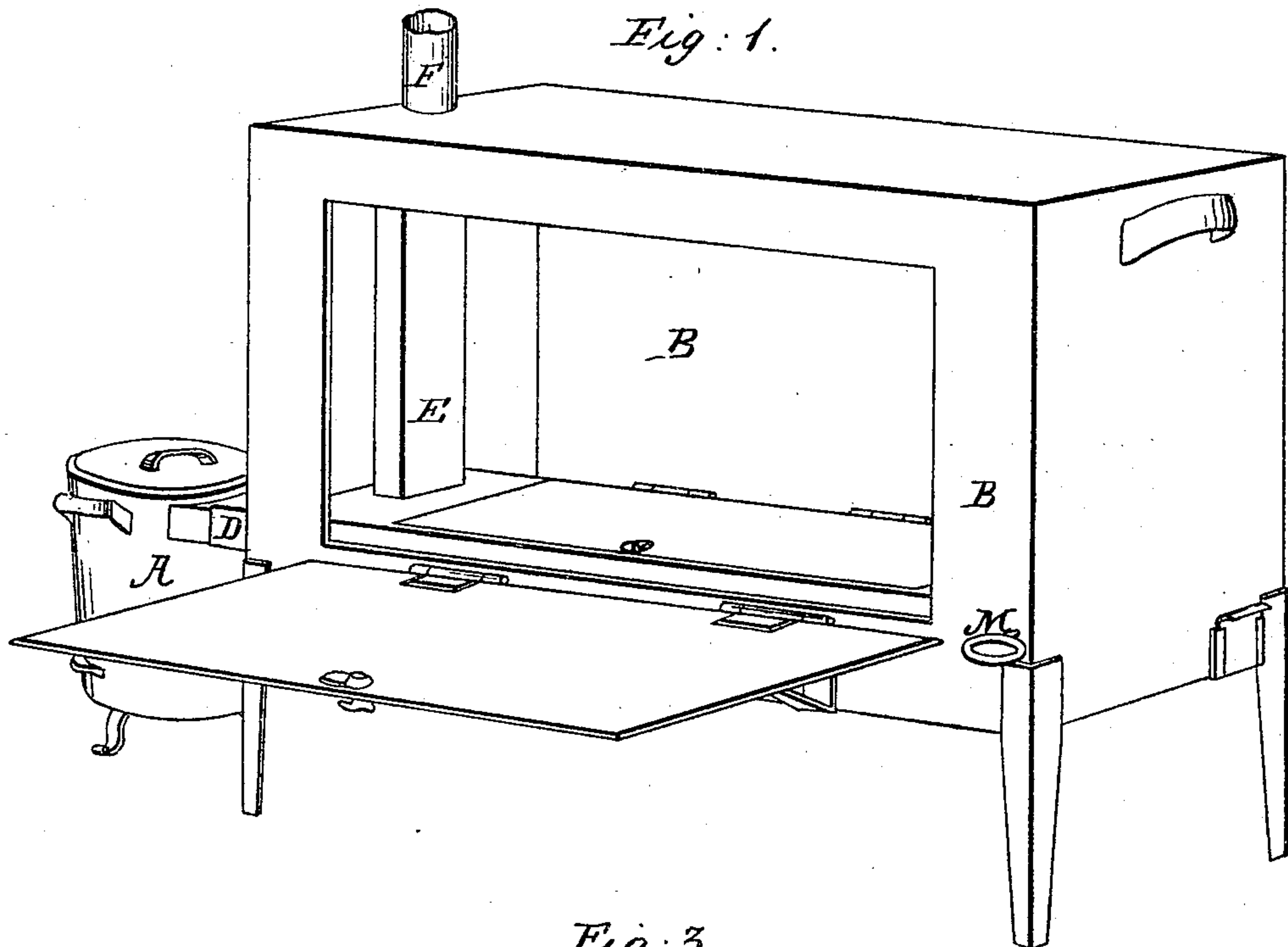


W. E. HAYES.
Cooking Stove.

No. 14,720.

Patented April 22, 1856.



Witnesses.
Galvin Walker
John A. Kelley

Inventor
William E. Hayes

UNITED STATES PATENT OFFICE.

WILLIAM E. HAYES, OF GENEVA, NEW YORK.

ARRANGEMENT OF DAMPERS OF COOKING-STOVES.

Specification of Letters Patent No. 14,720, dated April 22, 1856.

To all whom it may concern:

Be it known that I, WILLIAM E. HAYES, of Geneva, in the county of Ontario and State of New York, have invented certain
5 new and useful Improvements in the Mode of Constructing Summer-Stoves, of which the following description, illustrated by the accompanying drawings and references, is sufficiently clear and comprehensive to enable
10 others of competent skill to make and use my invention.

The nature of my improvement relates to an arrangement for alternately opening and closing the air passages within the rectangular
15 flues at the base of the oven.

Figure 1, is a perspective view of the whole apparatus. Fig. 2, is a perspective view of the flues and dampers at the bottom of the oven, represented as detached from
20 the stove, and Fig. 3, is a vertical longitudinal section of the same.

A is the circular fire box connected by the pipe B to the flue D within the sheet iron air chamber or oven C which may assume a
25 variety of forms according to the taste of the designer. Within this air chamber the flue D is connected at one end with the flue E, and with a like flue E' at the opposite end of the fire chamber, the latter being
30 continued over the top of the oven and connected with the pipe F, upon the top of the stove.

The mode of constructing the flues G, I, H will be understood by reference to Figs.
35 2 and 3. It is composed of the two outside passages G and H, and the central passage I which is equal in width to the upright flues at the ends of the air chamber or oven. The dampers J, K, are hung so that upon
40 being turned up it will close the bottom of the flue E and when down will close the passage I. And the other K hung upon the damper rod M so that it will close the flue E'. To this damper is attached the lever

N by a hinge, and passing through are 45 openings at O as a fulcrum or support and extending under the edge of the damper J so that upon K being opened J will be thereby closed, and as K is closed J will open by
50 its own weight. By means of this arrangement the smoke and heated air from the fire box will pass first through the outer passages G H and then return through the inner passage I to the flue E when the flue E' is closed. And when the flue E is closed it
55 will pass directly first through the inner passage I to the flue E' which will then be open, and from thence through the pipe or flue at the top of the oven to the pipe F as before. The regulation or change of position
60 (from the open to close) of these flues may thus be made by simply turning the damper rod M upon the outside of the air chamber. An important object in this arrangement is to furnish a stove for summer
65 use for the purposes of baking, warming, and otherwise preparing articles of food, or for heating sad irons, and for other purposes so that a small amount of heat will be communicated to the air within the room,
70 (the fire box being usually placed and concealed within the fire place constructed primarily in the apartments,) and yet a requisite amount of heat be carried through the passages and flues for the purposes above
75 named, different portions of which will be more or less heated as the dampers are turned up or down.

What I claim as my invention and desire
80 secured to me by Letters Patent is—

The dampers J, and K connected and operated by the lever N and damper rod M in the manner and for the purposes specified.

WILLIAM E. HAYES.

Witnesses:

CALVIN WALKER,
JOHN ACKLEY.