

(No Model.)

J. C. MACURDY.
Ventilated Bath Box for Chemical and Photographic
Purposes.

No. 234,879.

Patented Nov. 30, 1880.

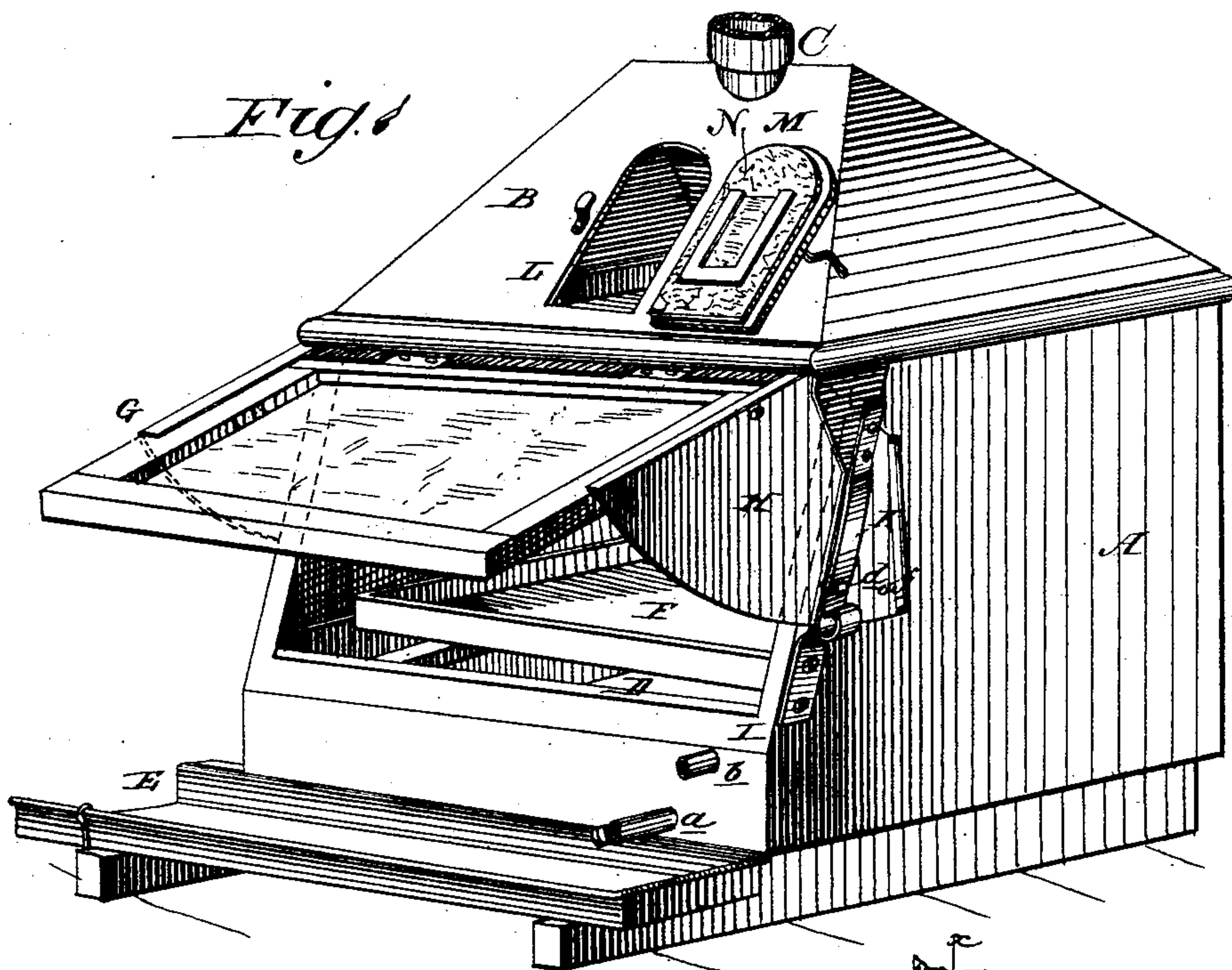


Fig. 2.

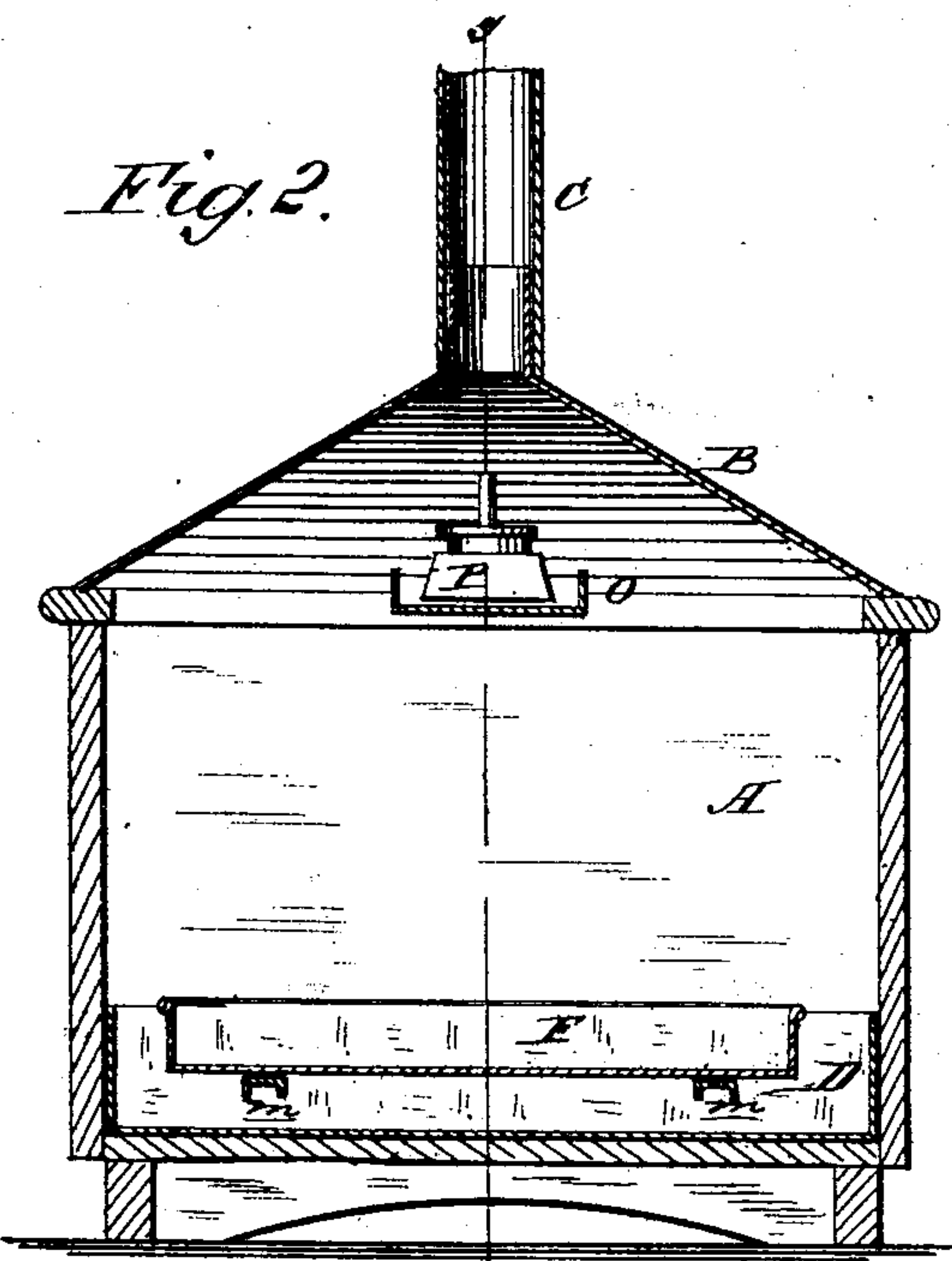
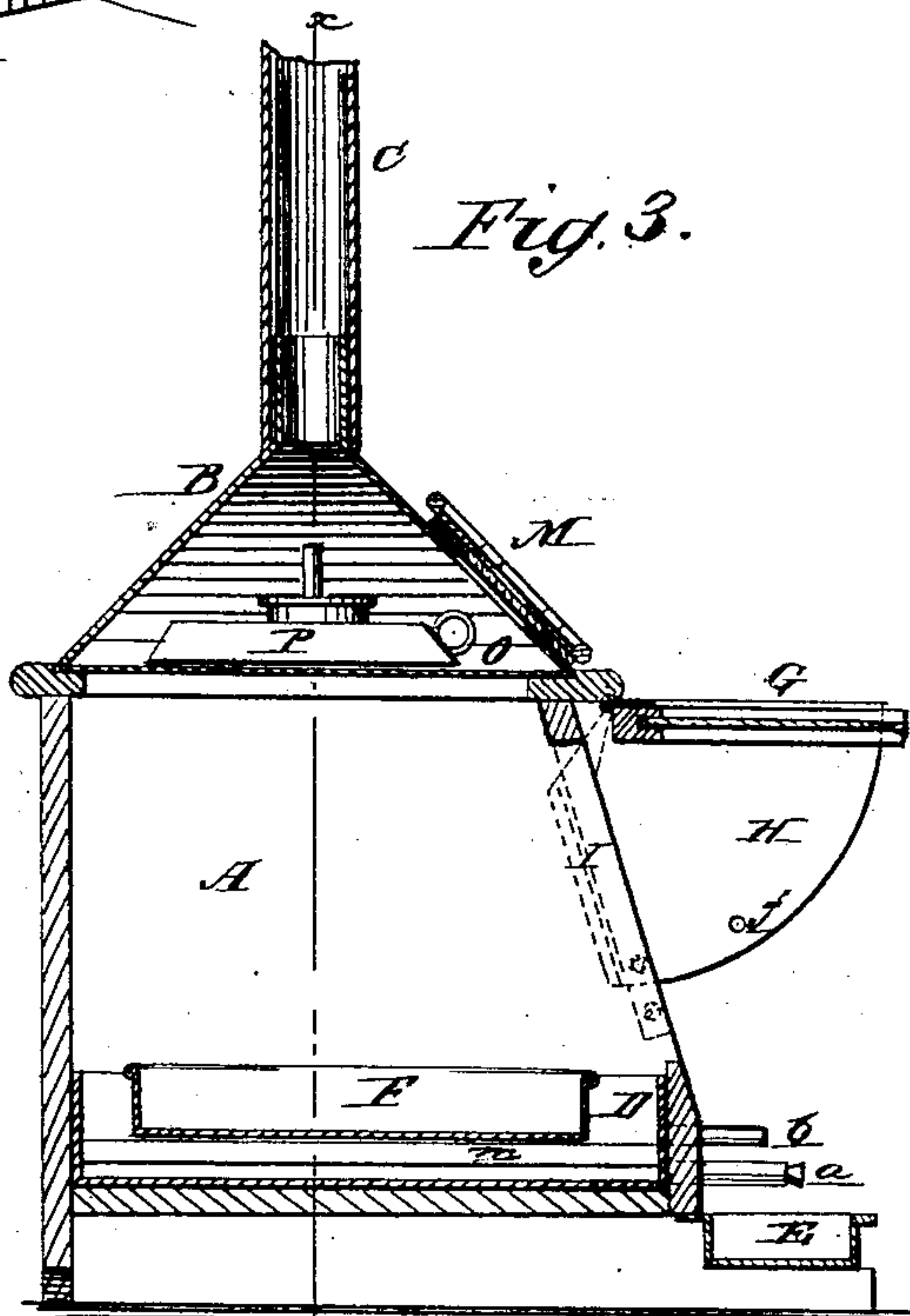


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES C. MACURDY, OF BOONVILLE, MISSOURI.

VENTILATED BATH-BOX FOR CHEMICAL AND PHOTOGRAPHIC PURPOSES.

SPECIFICATION forming part of Letters Patent No. 234,879, dated November 30, 1880.

Application filed March 25, 1880. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. MACURDY, of Boonville, in the county of Cooper and State of Missouri, have invented a new and Improved Ventilating Bath-Box for Chemical and Photographic Purposes, of which the following is a specification.

The object of this invention is to provide a bath-box for the use of photographers and others whereby the escape of poisonous gases, to the injury of the operator, shall be prevented.

The invention consists of a box for holding the bath tub or tray, and having a water-reservoir beneath said tub or tray, and provided also with a glass hinged lid in its front that may be raised to any desired angle; and it consists, further, of wings attached to the ends of said lid, so that when it is raised the wings close the spaces between its ends and the ends of the box; and it consists, further, of a platform for supporting a lamp in the top of said box, by means of which lamp an upward draft is maintained throughout the box.

Figure 1 is a perspective view of the box opened. Fig. 2 is a vertical sectional front elevation of the same on line *x x*, Fig. 3. Fig. 3 is a vertical sectional side elevation of the same on line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the box, that may be of any desired shape, provided with a tightly-fitting peaked cover or roof, B, from the apex of which a flue, C, projects upward, to conduct away all the fumes generated in said box.

D represents the water-reservoir, from which the waste-pipe and overflow-pipe *a b*, respectively, project through the front of said box and over a drip-pan, E, that is supported on the front of said box, and is designed to conduct away the liquid flowing from said reservoir.

F represents the tray designed to hold the solution that is used for clearing or freeing photographic negatives or ambrotypes, or for other purposes, said tray F being supported on bars or rods *m*, that are fixed horizontally across the interior of said box A, over or within the water-reservoir D.

G represents the hinged lid, made of a framed plate of glass, in order that the operator may observe the progress of the process or work within the box without opening said lid. To either end of this lid are attached the fan-shaped wings H, that extend rearward and lie flat against the ends of the box A, as shown, being guided or restrained in place by the strips I, that are fastened over them upon the ends of the said box. These wings H are designed to close the openings between the ends of the lid G and the box A whenever said lid G is opened, and thereby to prevent the escape laterally of the noxious fumes from the bath.

Fixed upon one of these guiding-strips I is a spring, K, provided on its lower end with an inward-projecting pin, *d*, which pin *d* is forced, by the action of the said spring K, to enter through an opening in said guiding-strip I, and into holes *f f*, made in a wing, H, in order to hold the lid G in any desired position. By pulling the lower end of this spring K outward the pin *d* is disengaged from the wing H, and the lid G may then be closed or opened to any extent.

L represents an opening made in the front of the peaked roof B, and designed to be tightly closed by the door M, that is felted or packed for the purpose of forming a tight joint. In this door M a glass, N, is inserted, through which glass the operator may observe the condition of the lamp that is placed within the said top B of the box.

O represents a platform having raised ends and edges, for supporting a lamp, P, the raised ends and edges of said platform serving to prevent the accidental dripping or overflow of oil from the lamp P into the bath below. When this lamp P is burning it will create a constant upward draft through the flue C, and thereby direct all fumes from the said bath away from the operator.

This device is especially designed for operating with baths of cyanide of potassium and other liquid solutions or gases that give off fumes or vapors that are injurious to the operator; and the application of the device is not confined to photography, but may be extended to a great variety of other chemical processes and manipulations.

The water in the reservoir beneath the bath-tray is designed to absorb the heavy gases that may fall from said tray. The waste-pipe is for drawing off the water at any time, in order that it may be renewed. The overflow-pipe prevents the water from rising too high within the box, and also serves to supply air for the lamp. The drip-pan is designed to conduct away the water drawn or overflowing from the reservoir, and also to catch any drops of solution that may fall when removing the photographic plates.

The lid of the box can be adjusted to any elevation required by the work without exposing the operator to noxious fumes, and through the glass of the lid he can observe the progress of the work.

The box may be made of suitable shape and dimensions to admit of an upright dipping-bath holder, instead of a tray, as shown.

In lieu of the lamp shown, a gas-jet may be used for insuring an upward draft through the

box; and if more light be desired within the box, glass may be inserted in the back or sides thereof.

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

1. A ventilating photographic and chemical bath-box constructed substantially as herein shown and described, consisting of the box A, flue C, water-reservoir D, provided with waste and overflow pipes, glass lid G, provided with wings H, and lamp P, supported on platform O, as set forth.

2. The combination, with the bath-box A, of the hinged glass lid G and wings H H, held in any desired position by the spring K, provided with the pin d, substantially as and for the purpose described.

JAMES C. MACURDY.

Witnesses:

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