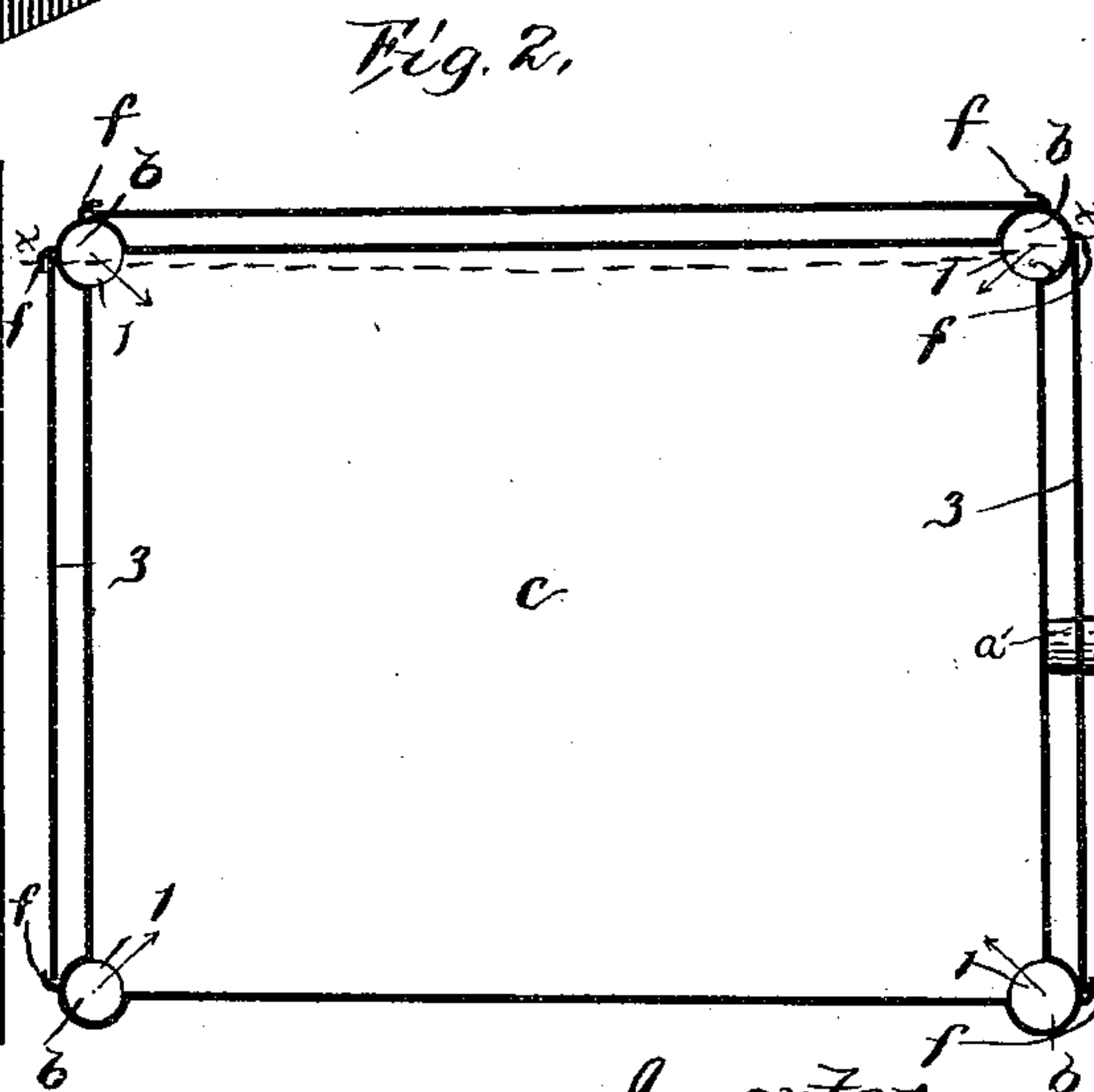
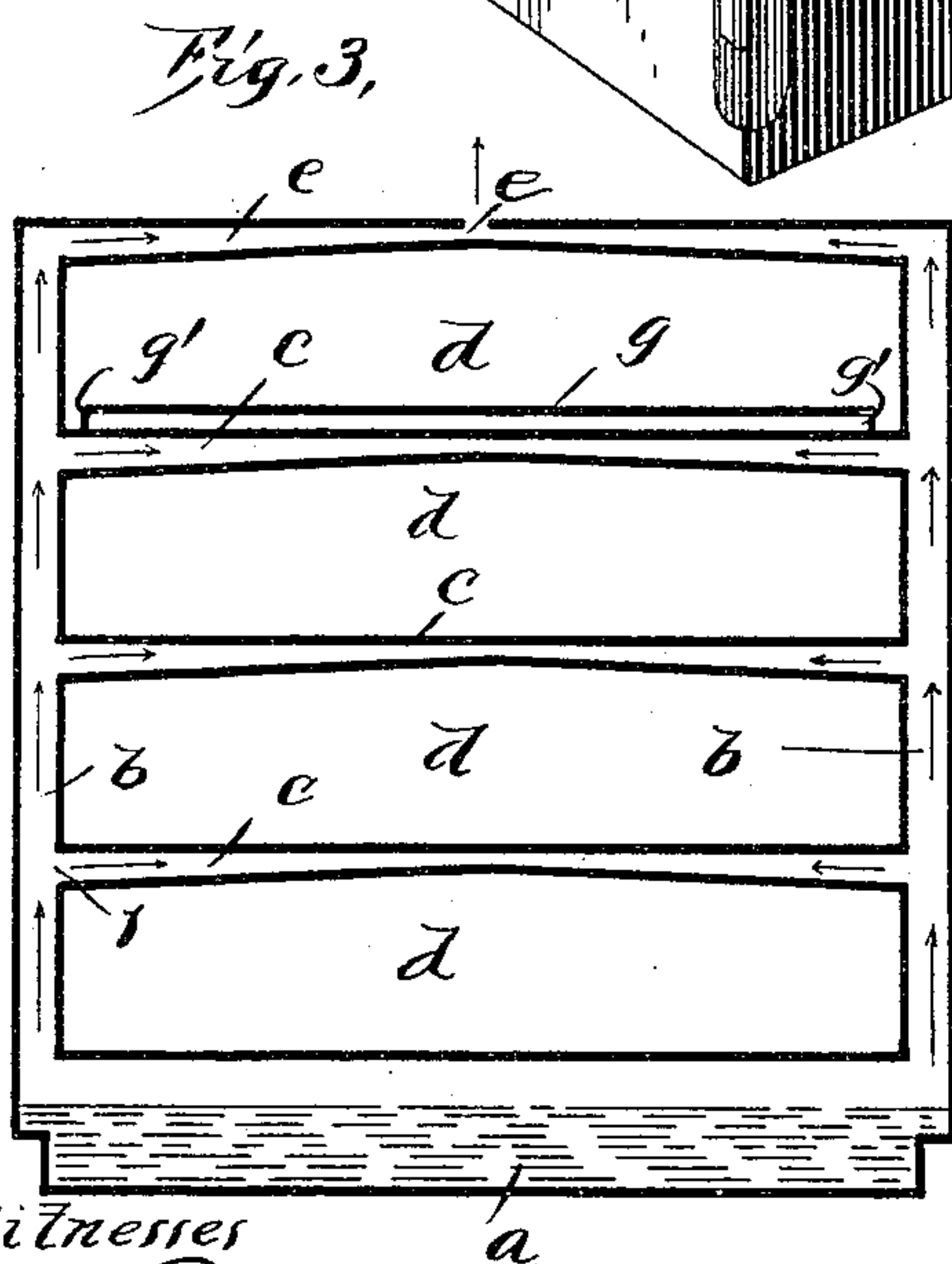
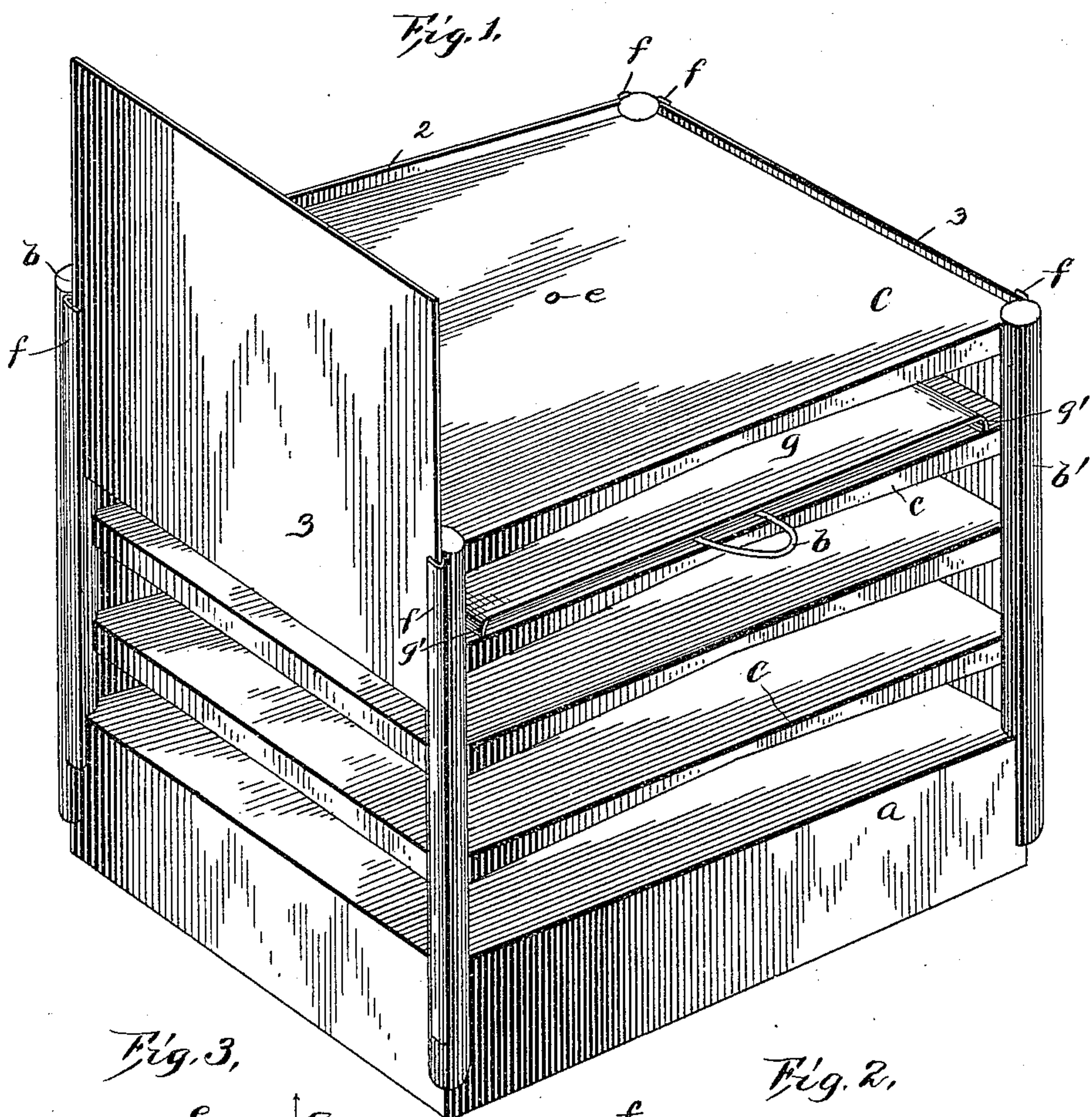


(No Model.)

A. CONKLIN.
FRUIT DRIER.

No. 448,846.

Patented Mar. 24, 1891.



Witnesses
E. C. Ruffey
H. E. Peck

Inventor
Arthur Conklin
by his Attorney
E. C. Ruffey

UNITED STATES PATENT OFFICE.

ARTHUR CONKLIN, OF GRANT'S PASS, OREGON.

FRUIT-DRIER.

SPECIFICATION forming part of Letters Patent No. 448,846, dated March 24, 1891.

Application filed June 13, 1890. Serial No. 355,277. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR CONKLIN, of Grant's Pass, in the county of Josephine and State of Oregon, have invented certain new and useful Improvements in Fruit-Driers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 the letters and figures of reference marked thereon, which form part of this specification.

This invention relates to certain improvements in fruit-driers.

The object of the invention is to provide an improved fruit-drier exceedingly simple and durable in construction and composed of a minimum number of parts, cheap in first cost, and easy and effective in operation. These objects are accomplished by, and this invention consists in, certain novel features of construction and in combinations of parts more fully described hereinafter, and particularly pointed out in the claim.

Referring to the accompanying drawings, Figure 1 is a perspective of the drier, one of the sides being shown raised to admit air. Fig. 2 is a horizontal cross-section of the drier through one of the steam-chambers. Fig. 3 is a vertical section taken in plane of line *x*, Fig. 2.

In the drawings, the reference-letter *a* indicates the closed flat rectangular sheet-metal boiler or water-vessel having a suitable filling opening or nozzle *a'*.

Four vertical hollow columns or tubes *b* extend up from the four corners of this boiler, and at their lower ends are secured rigidly upon the exterior corners of the boiler, with their interiors communicating with the interior of the boiler by means of lateral ports. These columns are of a desirable height to support any desired number of the steam-chambers *c*. Each steam-chamber is made rectangular in shape, of sheet metal, to form a narrow steam-space between the walls thereof. At its four corners each steam-chamber is secured to the four hollow columns, and each column is provided with a lateral port *l* into the steam-chamber to discharge steam into a

chamber from the boiler. The top of each chamber is flat and plain, while the bottom of each chamber slopes from the center down in opposite directions toward each end or side and the columns thereat, so that the water of condensation will never settle in the chamber, but will immediately and constantly flow toward and into said columns and back into the boiler. These chambers are arranged in a vertical series a suitable distance apart, so as to form the heating spaces or chambers *d* between them, with the four supporting and steam-supplying columns located at the exterior ends thereof. The uppermost chamber of the series can be provided with an exit-opening *e* for escape of steam.

The two rear supporting-columns are provided on their rear sides with the vertical flanges *f*, each at one edge secured longitudinally to its respective column and bent to form the two grooves or ways in which the back plate *2* can vertically slide. The two front and the rear columns are provided on their end sides with the corresponding flanges *f*, forming the ways or longitudinal vertical grooves in which the vertical end plates *3* slide.

The fruit to be dried is placed upon slides or trays *g*, each consisting of a rectangular piece of sheet metal having its end edges bent down to form flanges *g'*, upon which the tray slides, and which hold it from engagement with the top wall of the chamber upon which it rests, and this tray is provided with a suitable handle *b*, preferably, for small trays, consisting of a wire loop secured to the tray. One or more trays can be placed in each chamber. Spaces open at the upper ends are left between the chambers and inclosing slides to allow steam and vapors from the evaporation of the fruit to pass up and out. The front of the drier is usually left open, although it can be provided with closing means, if desired.

The great advantages of this compact, durable, and cheaply-constructed drier are obvious. As the chambers are partly closed in, more heat can be obtained with the same amount of steam, retaining the heat from columns and sides, which would otherwise be wasted, thereby drying the fruit more rapidly and with better results. Then, again, the slides being movable, the heat in the various com-

partments can be regulated by moving the slides up and down to open or close the compartments.

5 In operation the drier can be placed on a stove or over any other source of heat.

What I claim is—

10 A fruit-drier consisting of the boiler, the vertical series of steam-chambers forming the intervening heating-spaces, the hollow vertical posts supporting and located at the exterior corners of said chambers and opening into the boiler and said chambers, and the

vertically-adjustable side plates at their edges confined in vertical ways on said posts, said sides inclosing said heating-spaces and forming spaces open at the top at the ends of the steam-chambers and heating-spaces. 15

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ARTHUR CONKLIN.

Witnesses:

M. M. HARKNESS,
R. A. BOOTH.