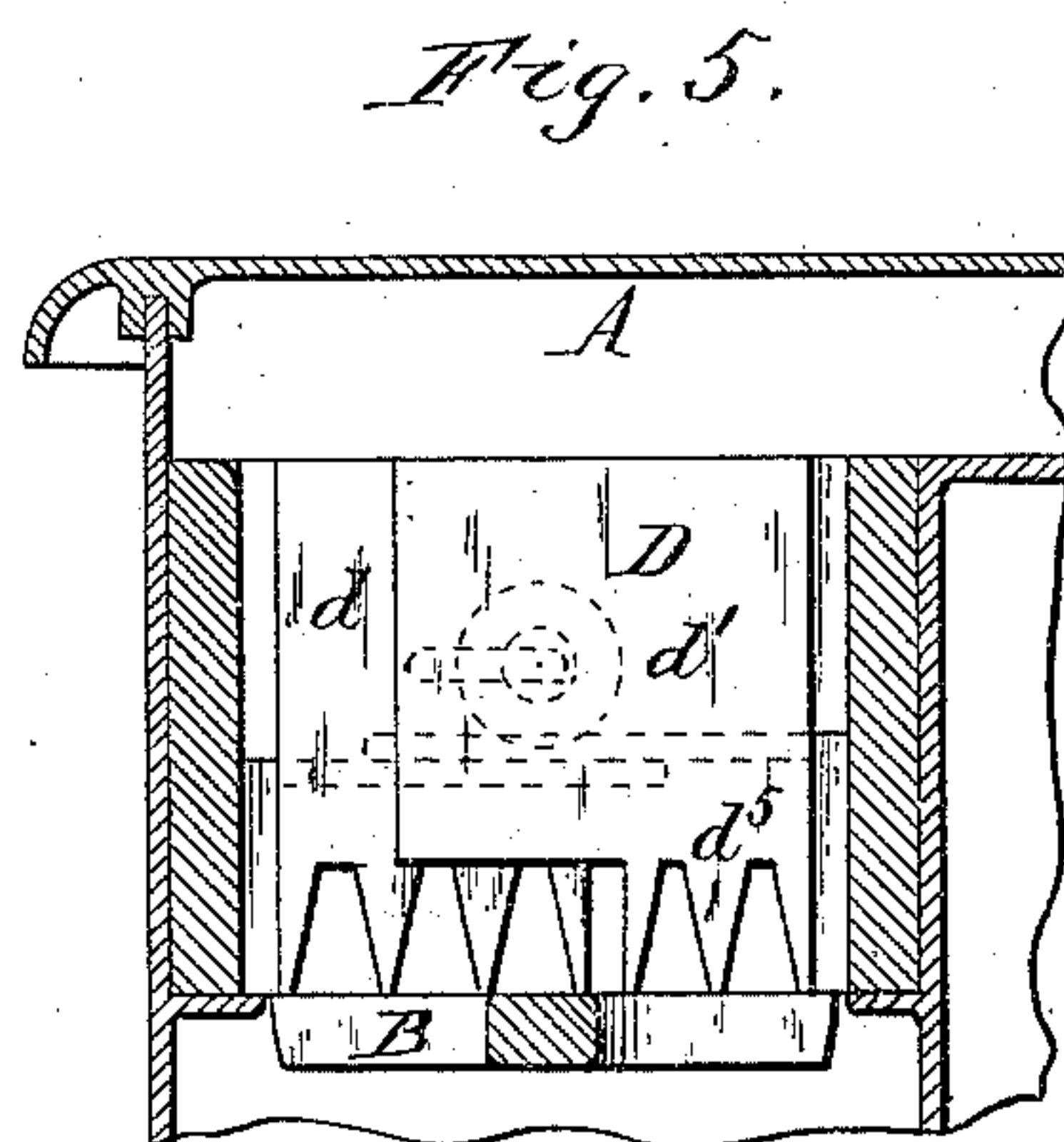
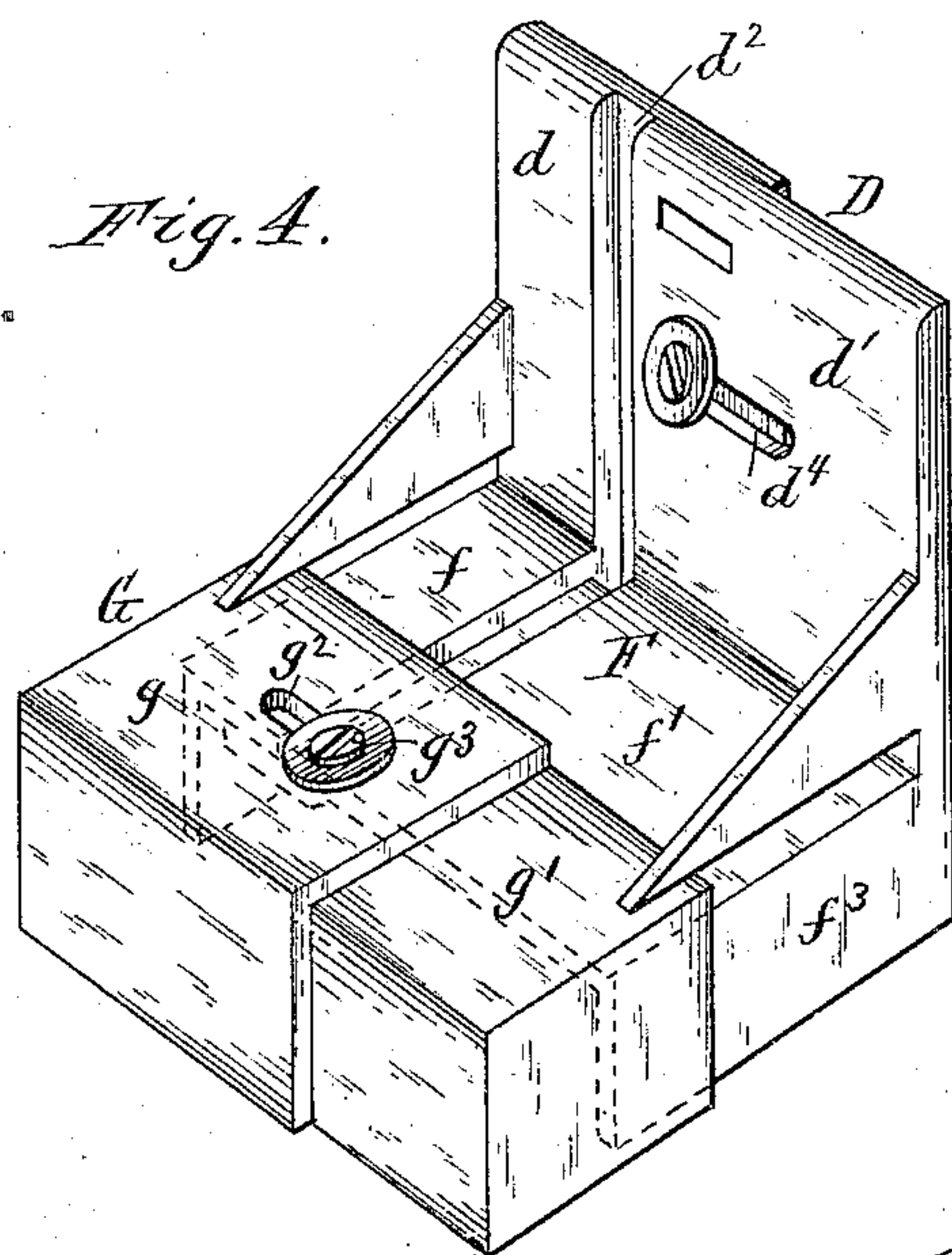
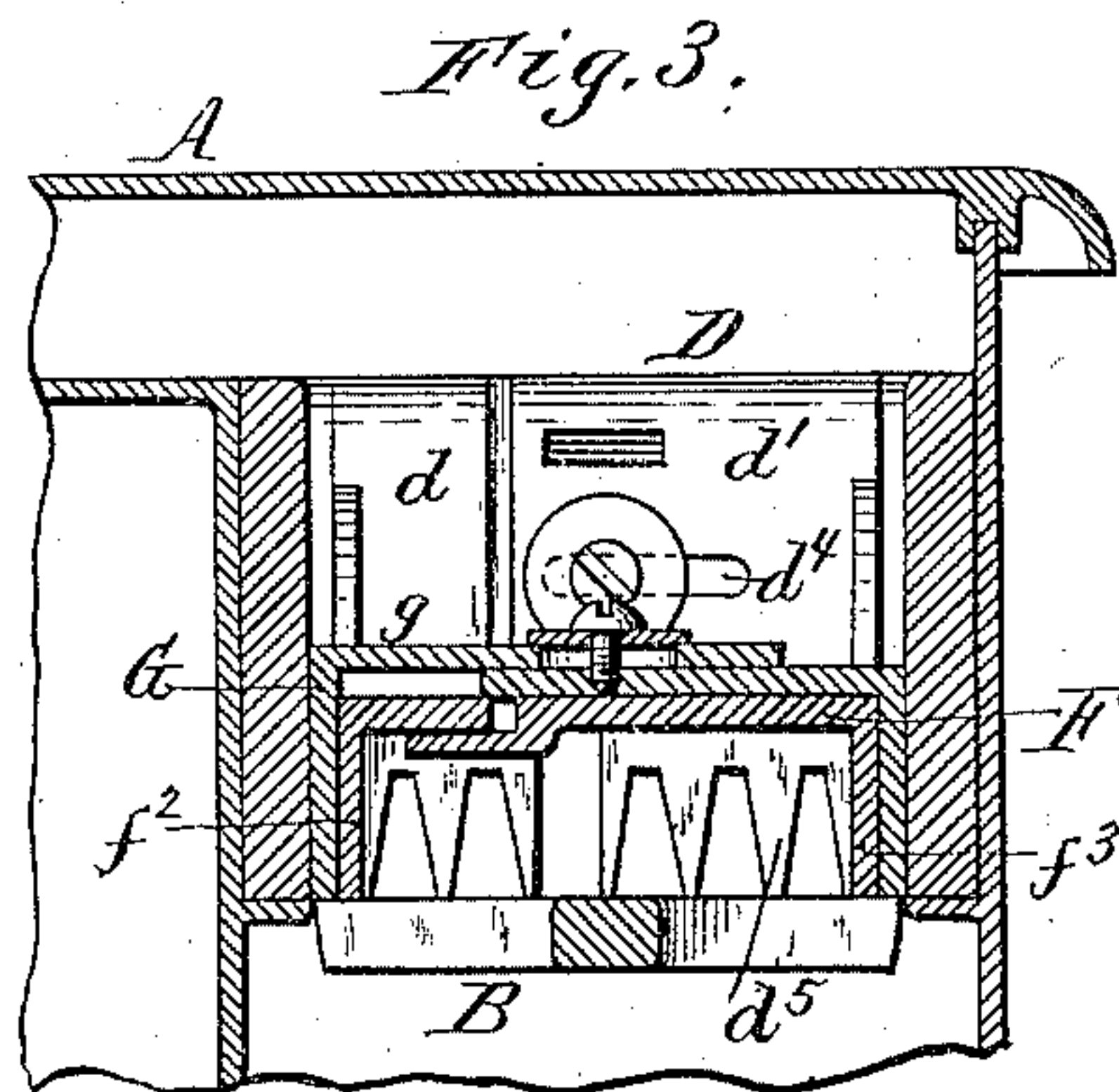
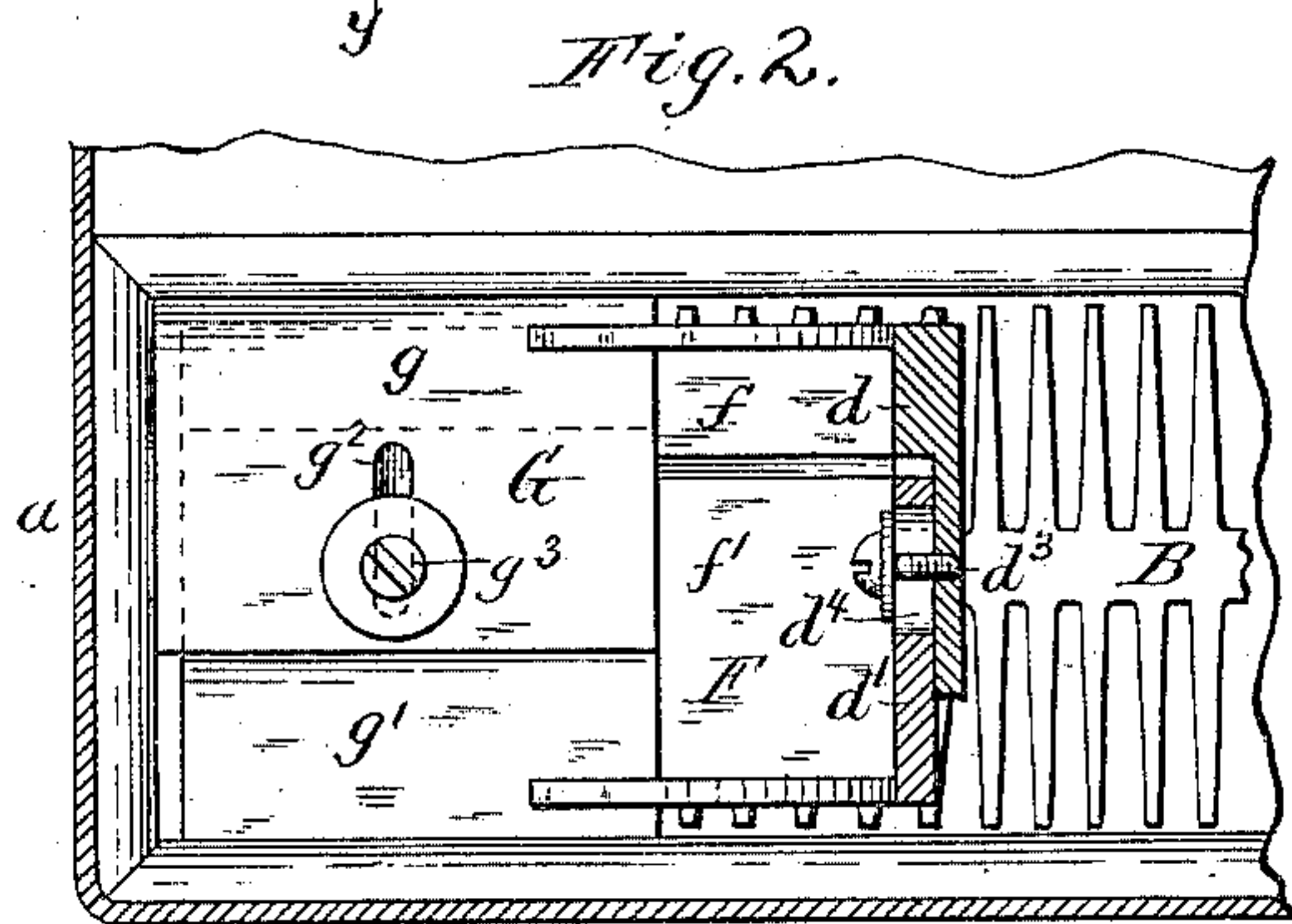
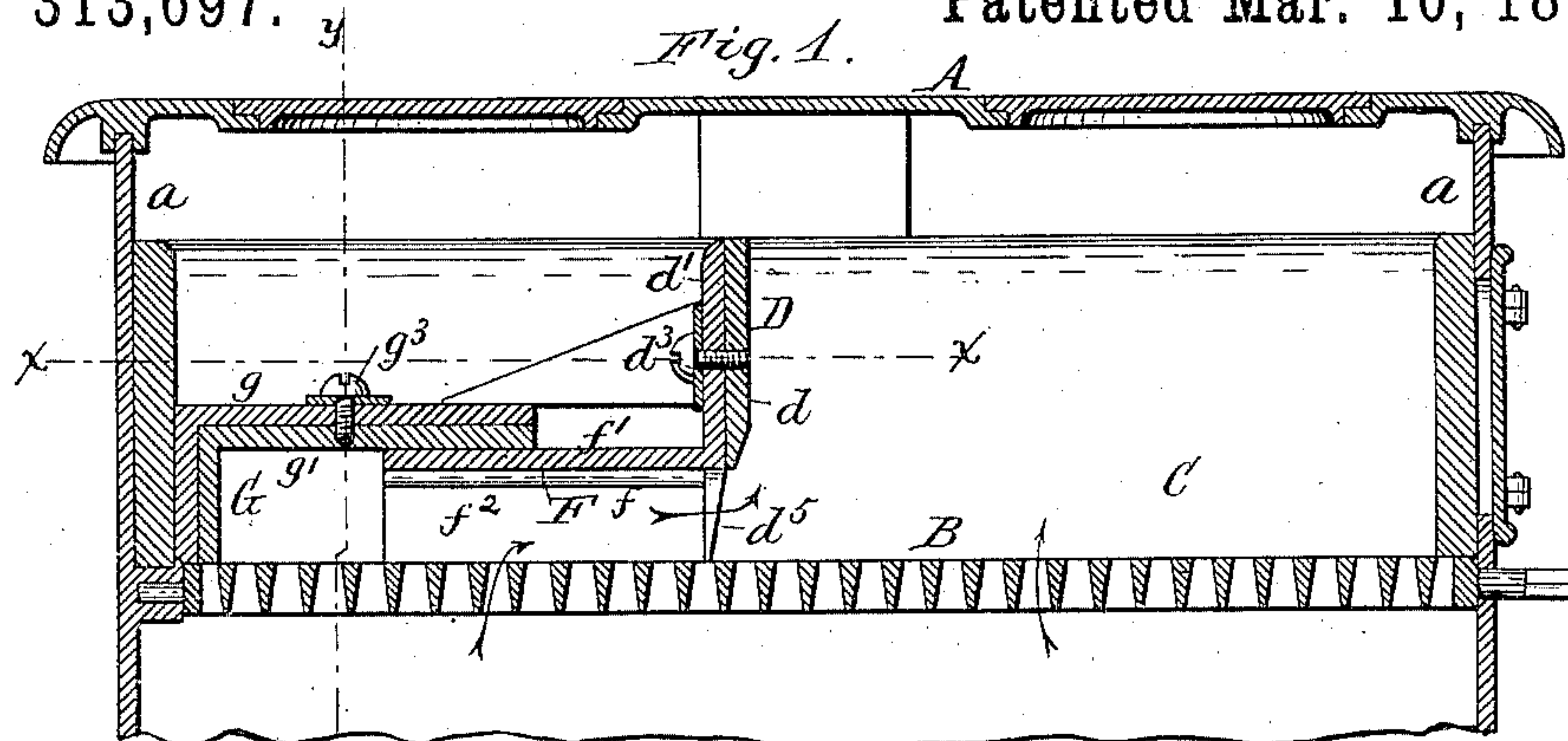


(No Model.)

R. WALKER.  
STOVE GRATE.

No. 313,697.

Patented Mar. 10, 1885.



*Theo. L. Popp.*  
*Chas. J. Buchheit.* } Witnesses

*Richard Walker* Inventor  
*By Wilhelm Boissier.*  
Attorneys.



# UNITED STATES PATENT OFFICE.

RICHARD WALKER, OF BATAVIA, NEW YORK, ASSIGNOR OF ONE-HALF TO  
CHARLES BLUMRICK, OF SAME PLACE.

## STOVE-GRATE.

SPECIFICATION forming part of Letters Patent No. 313,697, dated March 10, 1885.

Application filed March 18, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD WALKER, of Batavia, in the county of Genesee and State of New York, have invented a new and useful Improvement in Stove-Grates, of which the following is a specification.

My invention relates to an improved adjustable and false wall for the grates of cooking stoves and ranges, whereby the fire-pot or fuel-holding space may be lessened in size when it is desired to use a small fire.

My invention consists of a removable false wall for stove-grates which can be adjusted to the size of the fire-pot, and which will concentrate the draft on the fire and exclude cold air from the stove, as will be hereinafter more fully set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a longitudinal sectional elevation of a stove provided with my improvement. Fig. 2 is a horizontal section on line *x x*, Fig. 1. Fig. 3 is a vertical cross-section on line *y y*, Fig. 1. Fig. 4 is a perspective view of the false wall or partition removed from the stove, and on an enlarged scale. Fig. 5 is an end elevation of the removable false wall.

Like letters of reference denote like parts in the several figures.

A represents the top, and *a a* the side walls, of a stove, and B the grate, arranged in the fire-pot C in a well-known manner.

D represents an upright division-wall, which is composed of two plates, *d d'*, one of which, *d*, is cut away at *d<sup>2</sup>*, and provided with a bolt, *d<sup>3</sup>*, in such cut-out portion. The outer plate, *d'*, is fitted against the cut-out portion *d<sup>2</sup>* of the part *d*, and is provided with a horizontal slot, *d<sup>4</sup>*, through which the bolt *d<sup>3</sup>* passes. The two plates *d d'* of the upright division-wall are movable one upon the other and laterally adjustable by means of the bolt *d<sup>3</sup>*, sliding in the slot *d<sup>4</sup>*, and can be drawn out or contracted to adjust the division-wall D to the width of the fire-pot. The two plates *d d'* of the wall D are provided at their lower edges with downwardly-projecting teeth *d<sup>5</sup>*, which rest on the grate and support the wall D at a suitable height above the same.

F is a horizontal deflecting-plate extending

from the foot of the upright wall D and forming a shield to exclude air from that portion of the fire-pot which is not in use. This plate F is composed of two parts, *ff'*, formed integral, respectively, with the plates *d d'* of the wall D, and the part *f* is partly cut away, and the part *f'* laps over this cut-out portion, thus forming a covered joint corresponding with the joint of the plates *d d'* of the wall D. The parts *ff'* of the plate F are formed with vertical side walls, *f<sup>2</sup> f<sup>3</sup>*, which extend downwardly and rest upon the grate B. The upright wall D and the horizontal deflecting-plate F being formed in one piece, it is obvious that any lateral movement of the plates *d d'* of the wall D will also adjust the parts *ff'* of the plate F.

G represents an adjustable extension of the deflecting-plate F, formed of two parts, *g g'*, one of which overlaps the other, and is provided with a lateral slot, *g<sup>2</sup>*, through which projects a vertical bolt, *g<sup>3</sup>*, which is secured to the lower part, whereby lateral adjustment is effected when the wall D is drawn out or contracted in adjusting it to the width of the fire-pot. The inner sides of the parts *g g'* of the extension G fit under triangular-shaped lugs formed on the wall D above the horizontal plate F, and by means of these lugs and plate F the extension G is held firmly down upon the grate B. By adjusting the extension G lengthwise on the plate F the length of the device can be increased or reduced to cover a greater or less portion of the grate, as may be desired. The deflecting-plate F and extension G cover that portion of the fire-pot C which is not in use, and substantially prevent the admission of air into the stove except through the fire. The draft passes through the entire length of the grate. That portion of the air which enters through the grate below the plates F and G is deflected through the grating *d<sup>5</sup>* into the fire and assists in supporting combustion. My improved false wall therefore directs a copious volume of fresh air to the fire without cooling the stove, and supplies ready means for regulating the size of the fire to the requirements, thereby effecting an important saving in fuel and avoiding overheating the apartment in which the cooking-stove is located.



I claim as my invention—

1. The combination, with the upright division-wall D, of the horizontal deflecting-plate F and side and end supports,  $f^2 f^3 d^5$ , whereby the plate is held above the grate, thereby forming an air-passage underneath the horizontal plate F, by which the air entering below said plate is conducted to the fire, substantially as set forth.
2. The combination, with the division-wall D and deflecting-plate F, each composed of two parts adjustably secured together, of the adjustable extension G, composed of two parts adjustably secured together, substantially as set forth.
3. The combination, with the division-wall D, composed of two parts,  $d d'$ , both secured adjustably together, and each provided with a deflecting-plate,  $f f'$ , and overlapping tongue and supports  $f^2 f^3$ , of the extension G, composed of two parts,  $g g'$ , which overlap the deflecting-plate F, and which are adjustably secured together, substantially as set forth.

In testimony whereof I have hereunto signed my name this 11th day of March, 1884.

RICHARD WALKER.

In presence of—

F. L. BROWNE,  
JNO. J. BONNER.