

# M. WRIGHT. Bee-Hive.

No. 219,134.

Patented Sept. 2, 1879.

FIG. 2.

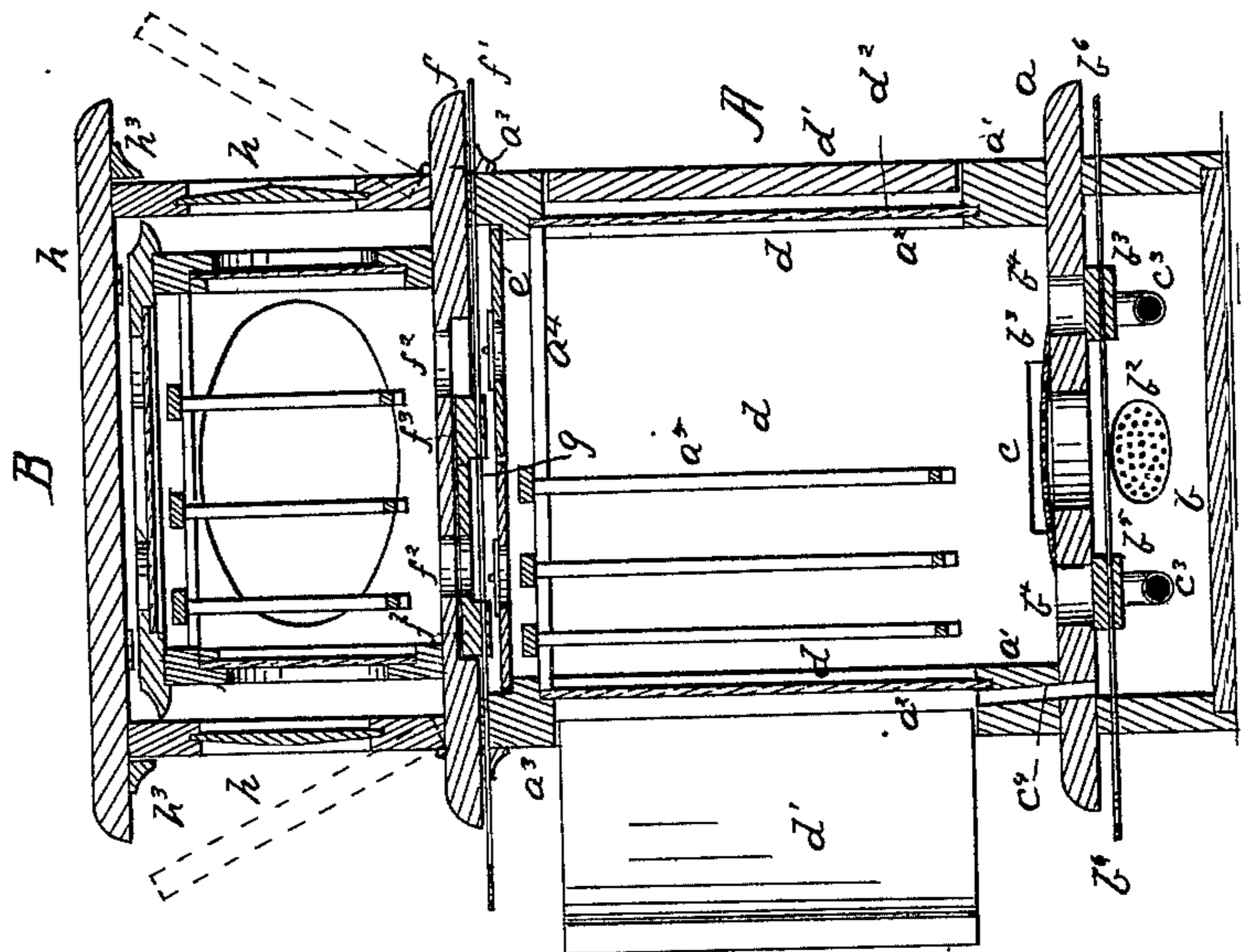
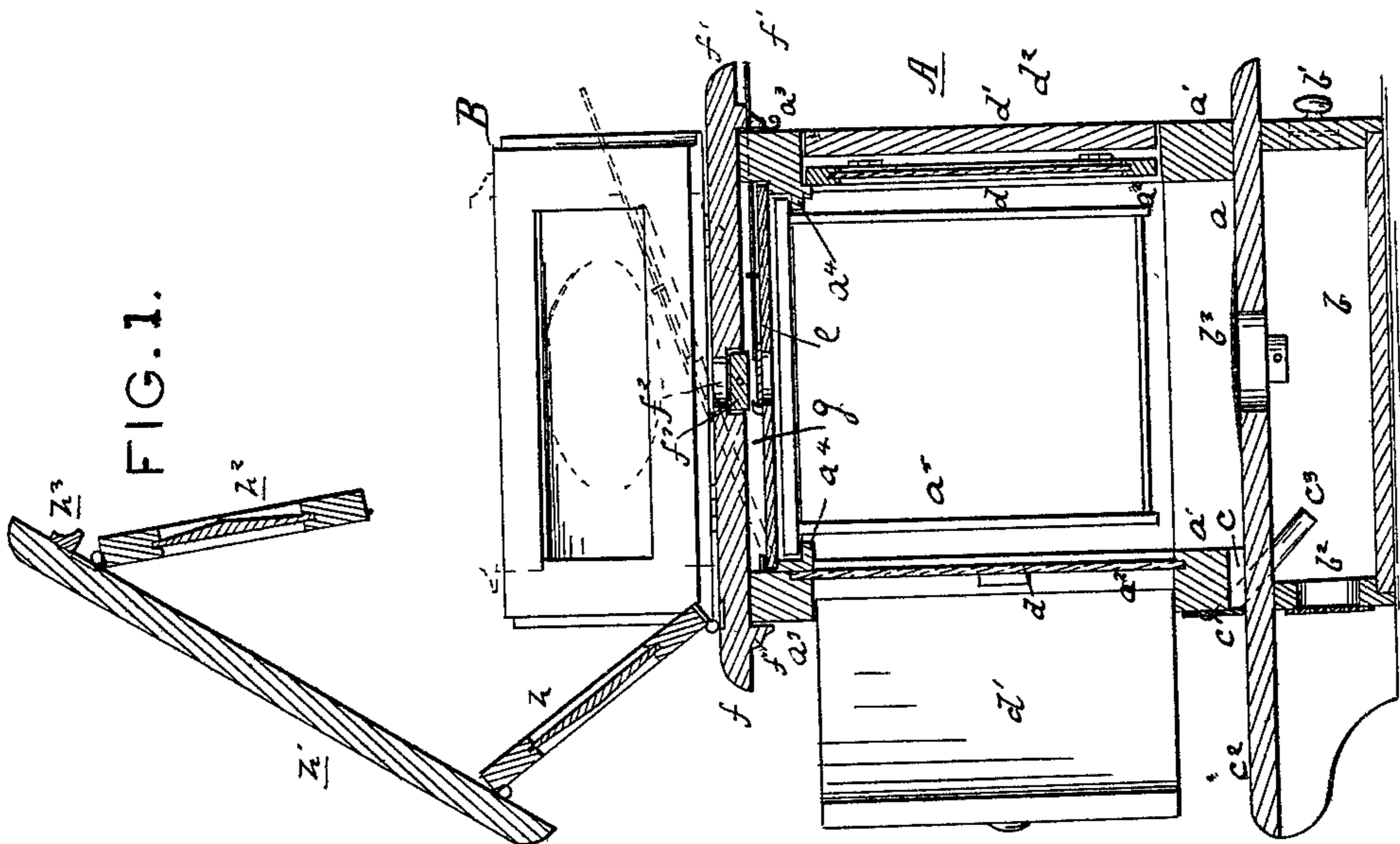


FIG. 1.



Witnesses:

Sam R Turner

F. D. Thomason

Inventor:

Morgan Wright

By R. S. & A. Lacey Attys

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FIG. 3.

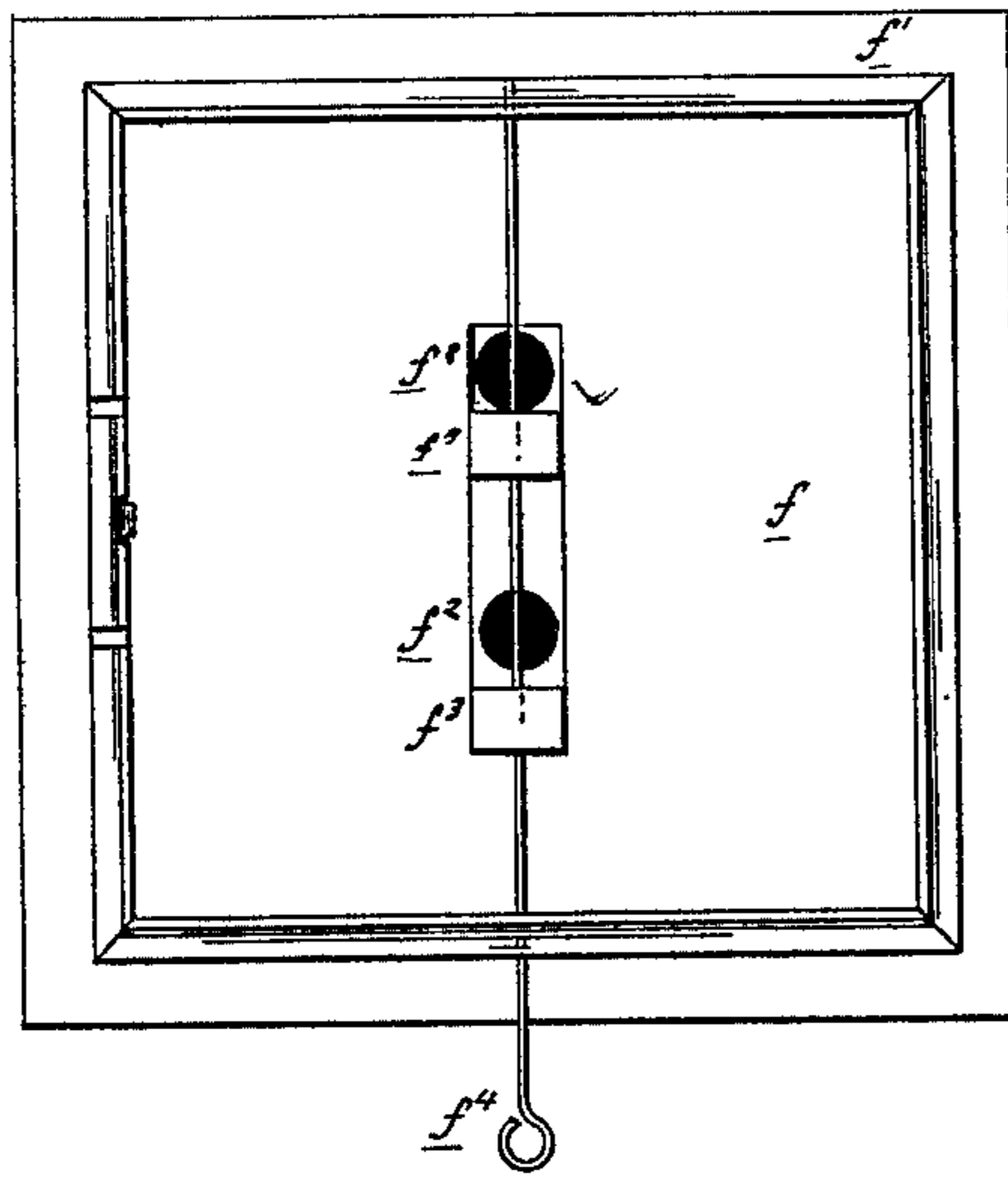


FIG. 4.

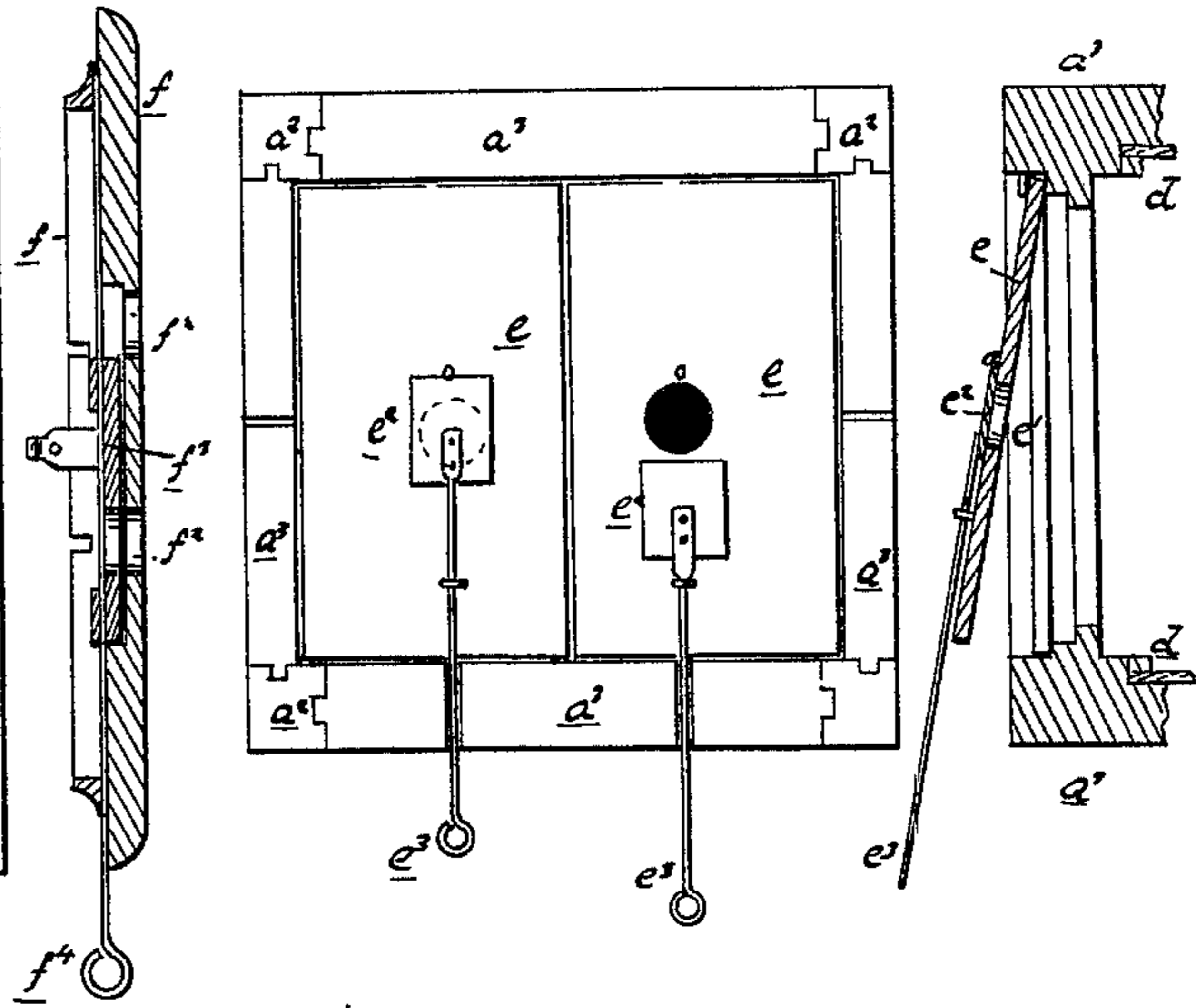


FIG. 5.

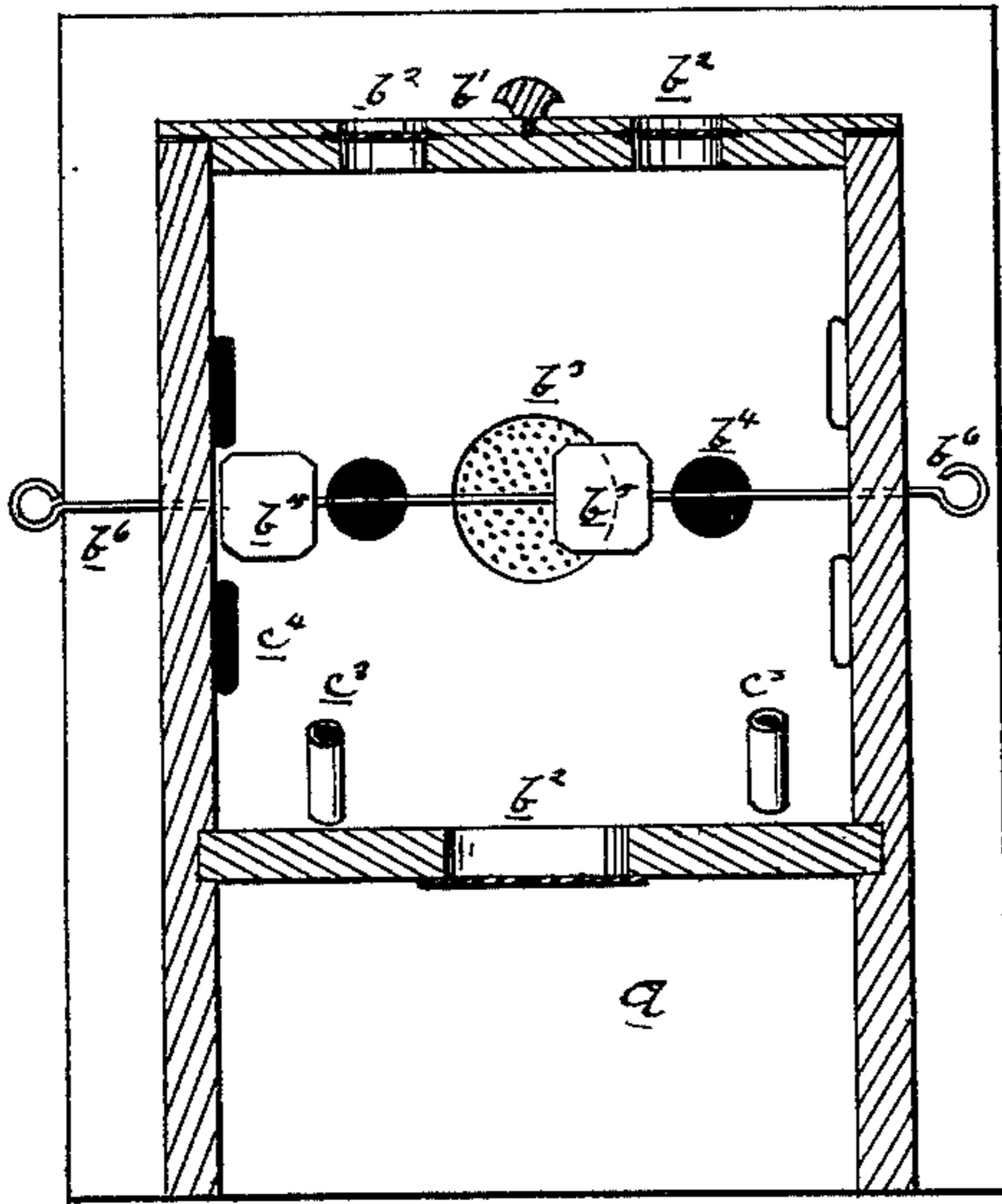
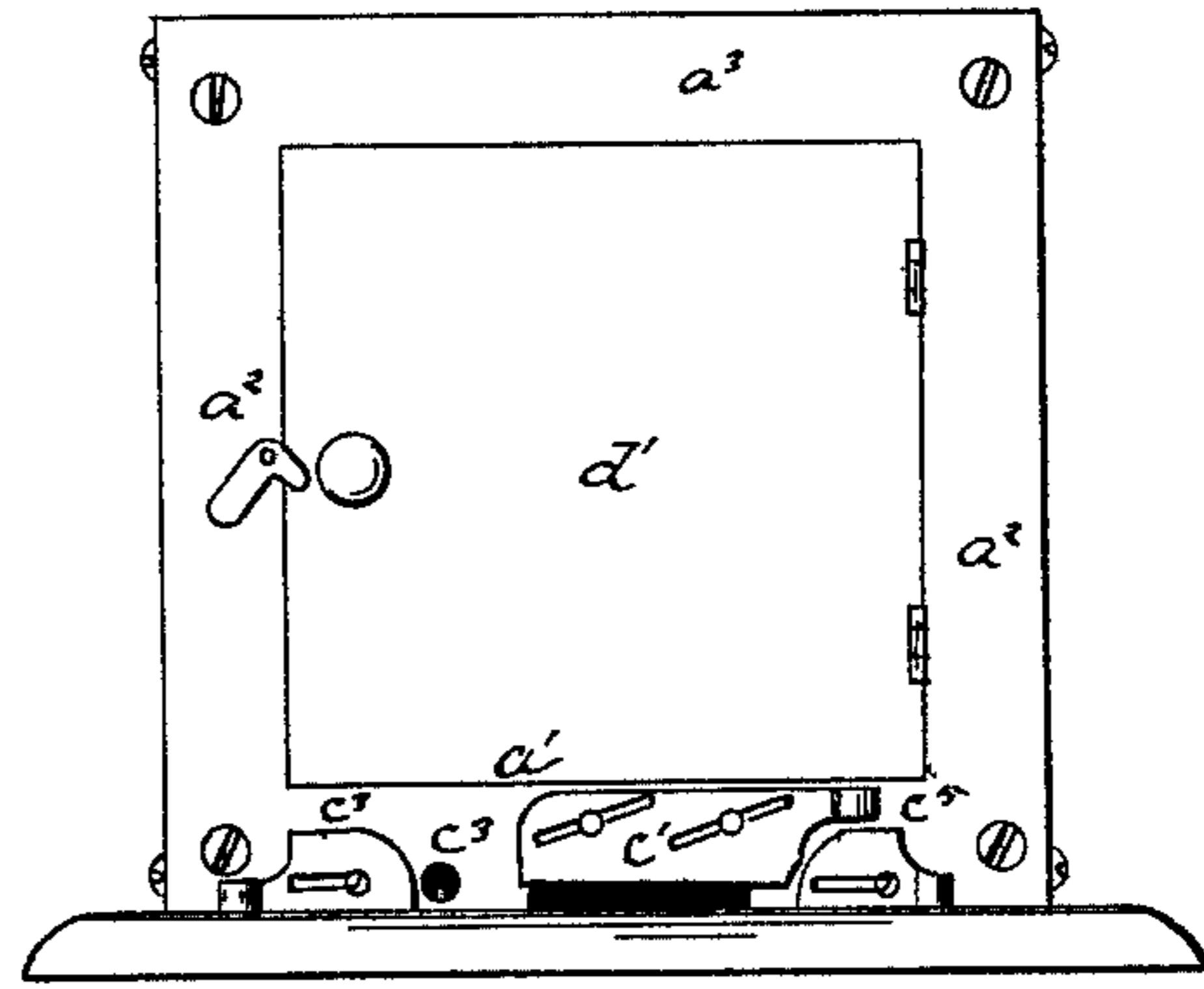


FIG. 6.



Witnesses:

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# UNITED STATES PATENT OFFICE.

MORGAN WRIGHT, OF SULLIVAN, ILLINOIS.

## IMPROVEMENT IN BEE-HIVES.

Specification forming part of Letters Patent No. 219,134, dated September 2, 1879; application filed June 17, 1879.

*To all whom it may concern:*

Be it known that I, MORGAN WRIGHT, of Sullivan, in the county of Moultrie and State of Illinois, have invented certain new and useful Improvements in Bee-Hives; 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 pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention has for its object to provide a hive having superior advantages for protecting the bees from moths and the extremes of heat and cold.

It consists in the peculiar construction and arrangement of the several parts, as will be hereinafter fully explained and set forth in the claim.

In the drawings, Figures 1 and 2 are vertical cross sections made on lines drawn through the center at right angles to each other. Fig. 3 is an under side view of the upper casing. Fig. 4 is a plan and section of the top of the under casing. Fig. 5 is an under-side view of the main floor or base board of the under casing, showing the under chamber in cross horizontal section. Fig. 6 is a side elevation of the under casing.

The hive is composed of two principal parts, viz., an under casing, A, and an upper casing, B, which may be separated when desired. The under casing is composed of the base-board *a*, to which are affixed the sills *a*<sup>1</sup>, corner parts *a*<sup>2</sup>, and plates or top bars *a*<sup>3</sup>, all of which are firmly united together, giving a substantial frame, to which the several parts of the under case are affixed. On the under side of the base board *a* I have provided a sub chamber, *b*, for uses hereinafter specified. This sub-chamber *b* has a door, *b*<sup>1</sup>, ventilators *b*<sup>2</sup>, and has leading from it into the chamber of the casing A the ventilator *b*<sup>3</sup>, covered by the thin wire-gauze, and the passages *b*<sup>4</sup> *b*<sup>4</sup>, which are covered by slide valves *b*<sup>5</sup>, operated from without by the rods *b*<sup>6</sup>. Through one of the sills *a*<sup>1</sup>, next the base board *a*, I form the openings *c*, through which the bees enter the hive. The base-board is extended on this side of the

hive to provide an alighting platform for the bees. The opening *c* is closed, when desired, by a slide. *c*<sup>3</sup> *c*<sup>3</sup> are two small tubes placed in the front of the hive and in either side of the entrance *c*, and inclined downward into the sub chamber *b*. These tubes are to permit moths to enter the sub chamber, where they may be killed.

Opening from the sub chamber upward through the sills *a* and into the dead air-chamber, hereinafter described, are a series of passages, *c*<sup>4</sup>, which will permit moths to enter the dead air chamber, where they may be readily got at and killed. The outer ends of these moth-tubes may be closed by slides *c*<sup>5</sup>.

Within the openings made by the corner posts *a*<sup>2</sup> and plates *a*<sup>3</sup> and sills *a*<sup>1</sup>, I place the glass panes *d*. These sit in toward the inner edges of said framing-bars, and they may all, if desired, be fixed in a separate frame and hinged to the parts *a*<sup>2</sup>, so that they can be opened to get at the bees or comb within. Outside of these glass panels I provide doors *d*<sup>1</sup>, which are hinged in the same openings, and so that when closed dead-air chambers *d*<sup>2</sup> are provided between them and the panes of glass next them. The plates or top bars *a*<sup>3</sup> are provided with suitable ledges *a*<sup>4</sup>, on which the movable comb frames *a*<sup>5</sup> are hung. The upper end of the main chamber of the hive within the casing A is closed by a cap, *e*, which rests in rabbets cut in the top bars *a*<sup>3</sup> just above the comb-rests *a*<sup>4</sup>. The caps *e* are formed, by preference, in two pieces, and each is provided with a bee-passage, *e*<sup>1</sup>, closed by a slide, *e*<sup>2</sup>, operated by rods *e*<sup>3</sup> *e*<sup>3</sup>. The caps *e* may be readily lifted from their places, as is shown in sectional part of Fig. 4.

*f* is the base board of the upper casing, B. It is provided with flanges *f*<sup>1</sup>, which fit down outside the top bars, *a*<sup>3</sup>, of the under casing. Through the base *f* are formed passages *f*<sup>2</sup>, through which the bees reach the boxes in the upper casing. The holes *f*<sup>2</sup> are provided with slide-valves *f*<sup>3</sup>, moved by a rod, *f*<sup>4</sup>.

The cap *e* and the base *f* are so arranged with reference to each other that there is provided a dead-air chamber, *g*, between them, and ample space in which to operate slide-valves *e*<sup>2</sup> and *f*<sup>3</sup>.

To the base *f* are hinged three of the sides

$h$ , in such manner that they may be turned down to a horizontal position, resting on the outer rim of the said base. The movement of turning down is indicated in Figs. 1 and 2.

The top  $h^1$  is hinged to one of the sides  $h$ , and to the top is hinged the fourth side,  $h^2$ , so that when raised it folds inward, as shown.

The vertical edges of the side  $h$   $h^2$  are rabbeted, so that when folded and the lid  $h^1$  closed down on them, they lock firmly together, forming a compact and tight casing. Short flanges  $h^3$  are fixed on the lid, which fit outside the upper ends of the sides  $h$ .

This construction enables me to open up the hive and have at hand a suitable table or platform on which to place empty or full boxes when removing honey. The work is thus greatly facilitated.

Within the casing B, I place the surplus honey box or boxes, as shown, which boxes are provided with glass sides, that the progress of the work of the bees may be inspected.

The advantages of this hive will be apparent to any bee-culturist.

I have provided dead-air chambers almost entirely surrounding the main hive, while the facilities for driving the bees from one chamber to another are of a superior character.

The bees can be, if desired, driven into sub-chamber  $b$ . It is often found necessary to remove bees from their hive for various purposes. In my hive they can be driven and secured in the sub chamber, and there retained until the necessary work in the main hive A is completed, after which they can be let back, and

thus any confusion or injury to the swarm is prevented.

The well-known habits of the moth will take it through the tubes  $c^3$ , and thence into the dead air chamber  $d^2$ , as it seeks to reach the comb in the hive.

The most perfect ventilation is secured, and the dead-air chambers are a preventive against the extremes of heat and cold.

The casing B may be entirely removed from the casing A, if desired, and the latter can be covered by a plain board held down by any suitable means.

What I claim as my invention is—

The improved bee hive composed of the main casing A and upper detachable casing, B, having the sub-chamber  $b$ , and provided with suitable ventilators and bee passages and cut-off valves, and having the glass panes  $d$  and the doors  $d^1$  arranged within the openings of the framings, so that dead-air chambers  $d^2$  are provided, surrounding the sides of the comb chamber, and having the cap  $e$  let down into the top bars,  $a^3$ , so as to provide the air-chamber  $g$ , and having the moth-passages  $c^3$  and  $c^4$  leading into the chamber  $b$  and chambers  $d^2$ , substantially as and for the purposes set forth.

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

MORGAN WRIGHT.

Witnesses:

W. G. PATTERSON,  
A. P. LACEY.