

(No Model.)

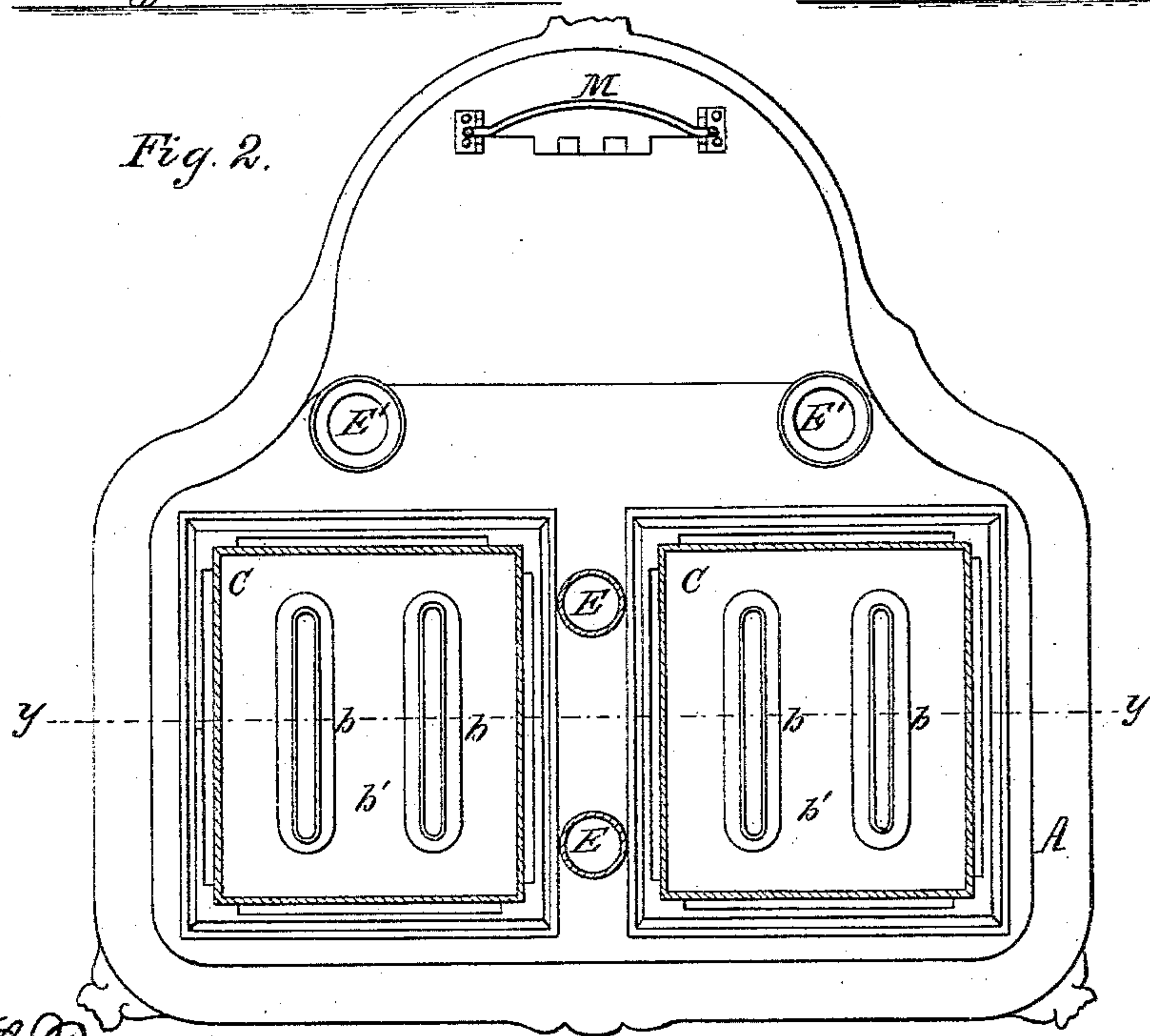
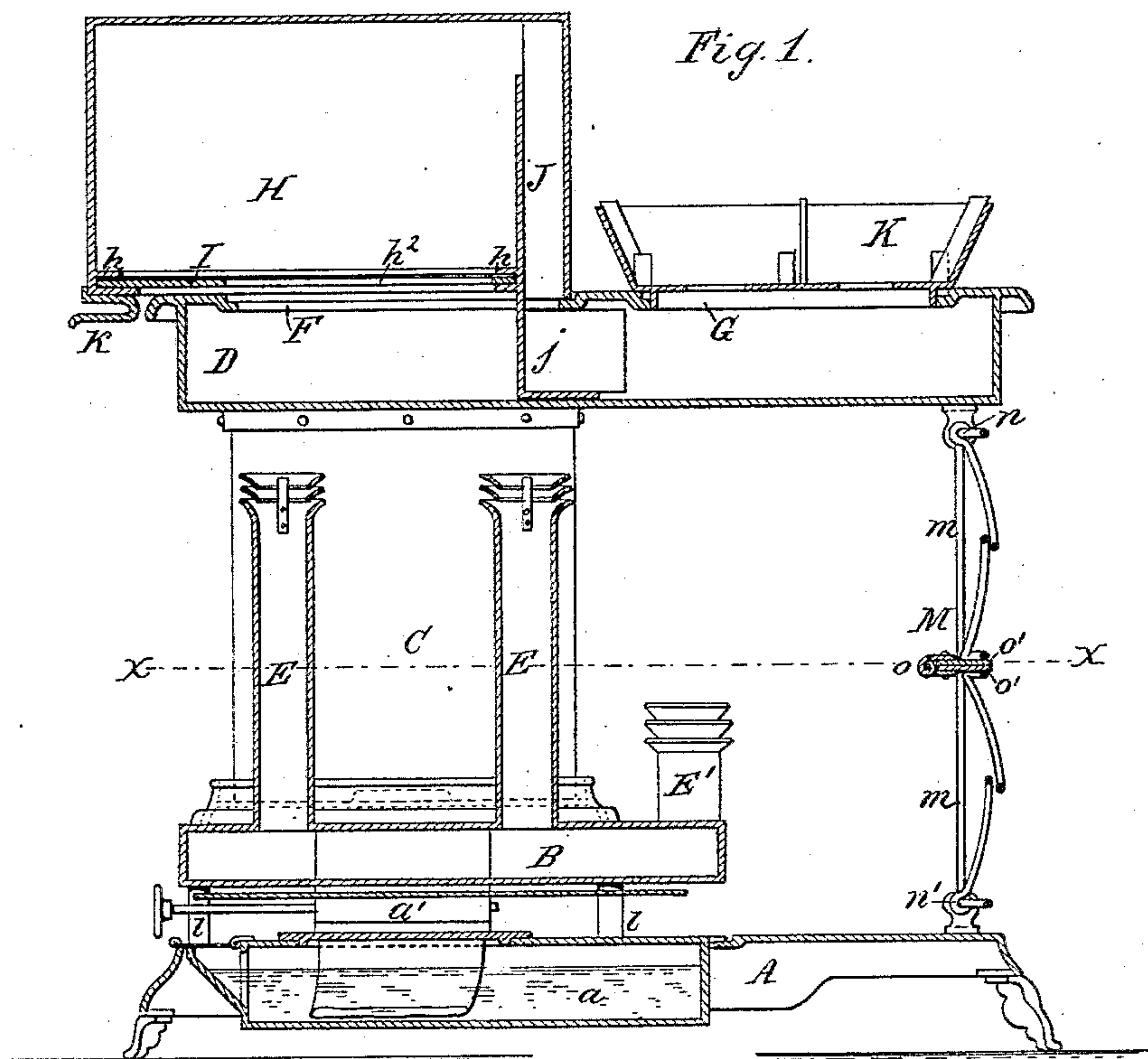
3 Sheets—Sheet 1.

C. T. HAM.

OIL STOVE.

No. 300,601.

Patented June 17, 1884.



*Thos. L. Popp*  
*Geo. E. Pittman* Witnesses.

*Chas. T. Ham* Inventor.  
*By Wilhelm H. Bonnes* Attorneys.

(No Model.)

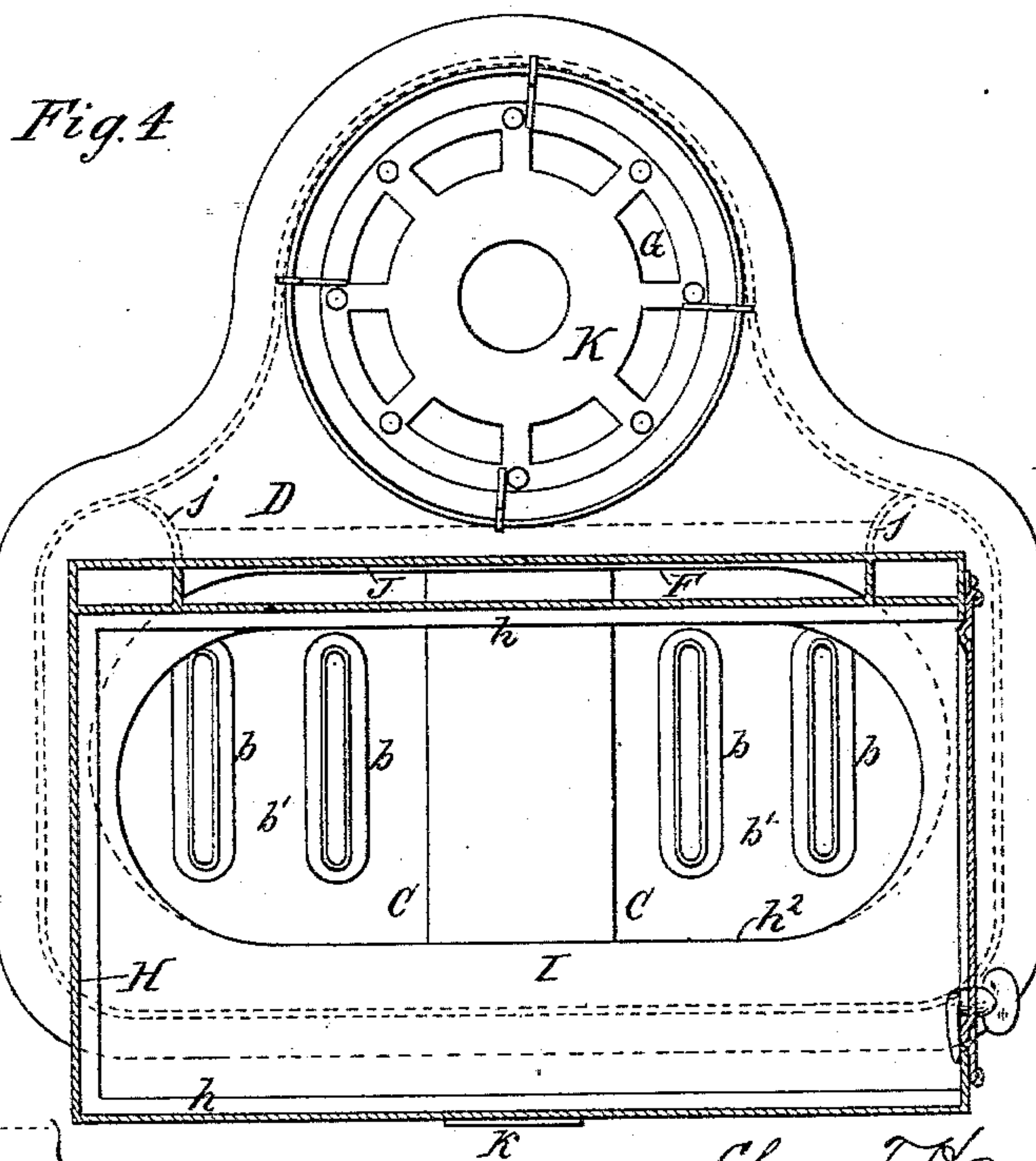
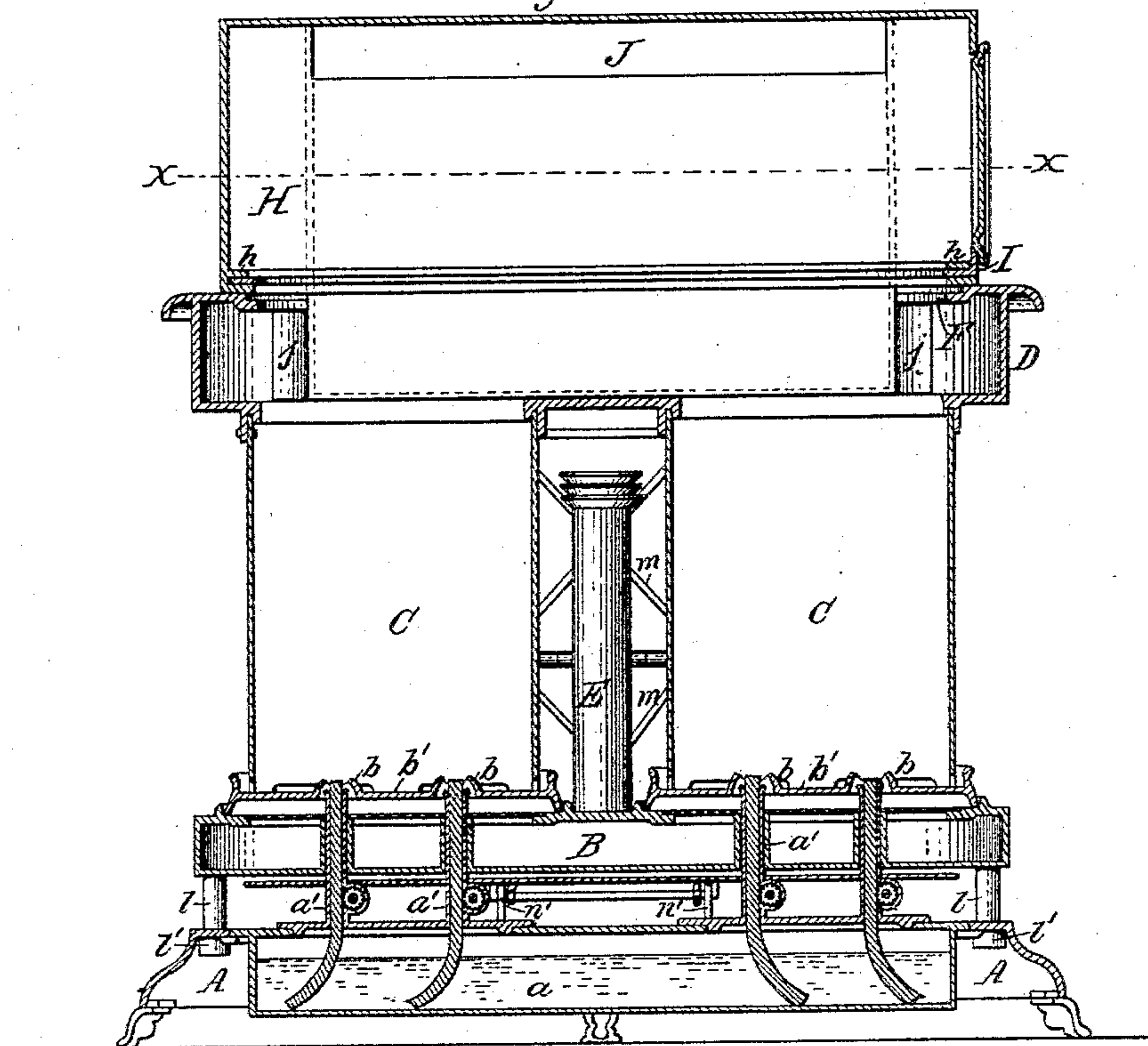
3 Sheets—Sheet 2..

C. T. HAM.

**OIL STOVE.**

No. 300,601.

*Fig. 3.* Patented June 17, 1884.



Theo. L. Popp  
Geo. E. Pittman  
Witnesses:

Chas. T. Ham Inventor.  
By Wilhelm H. Bonner. Attorneys.

(No Model.)

3 Sheets—Sheet 3.

C. T. HAM.  
OIL STOVE.

No. 300,601.

Patented June 17, 1884.

Fig. 5.

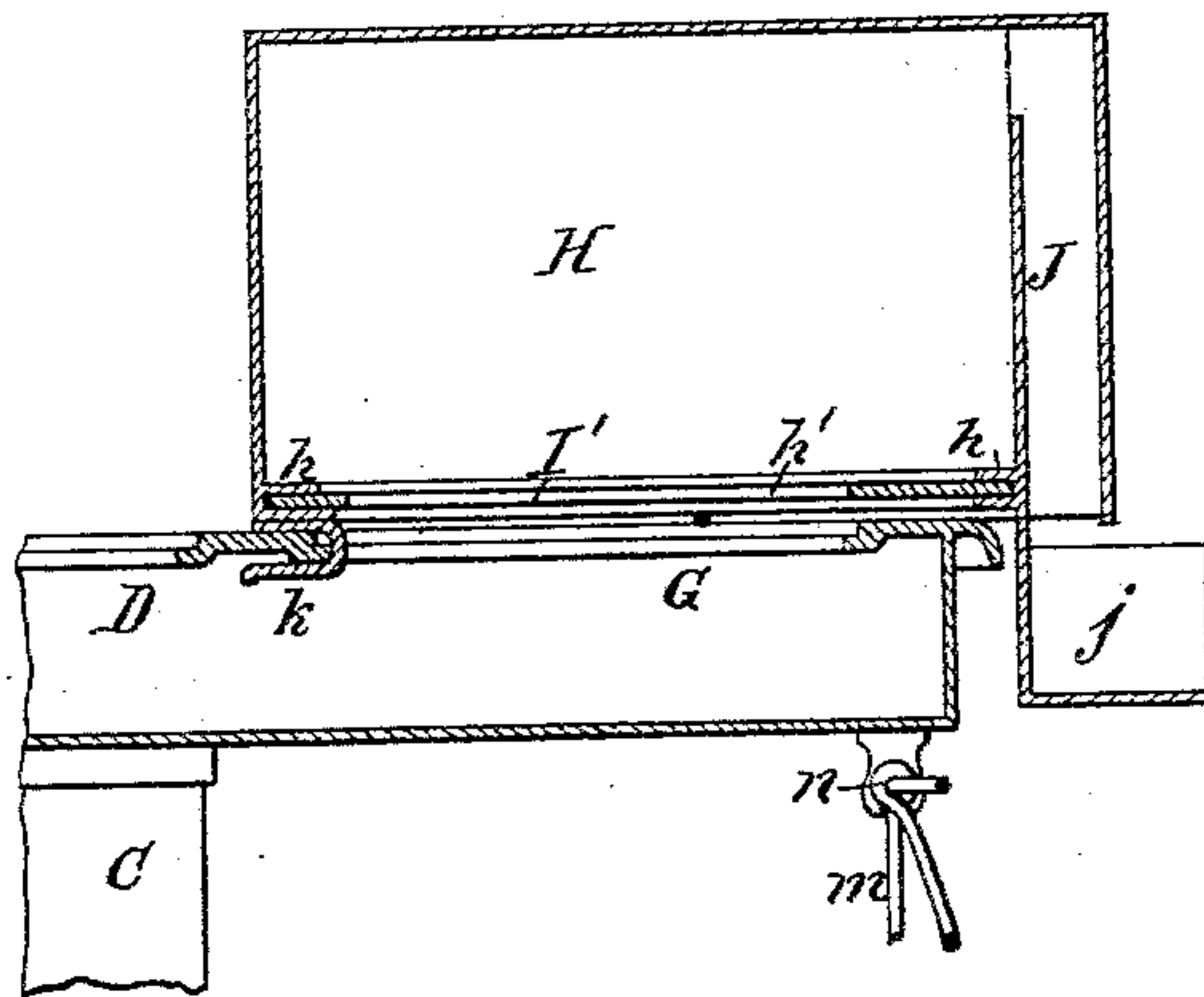


Fig. 6.

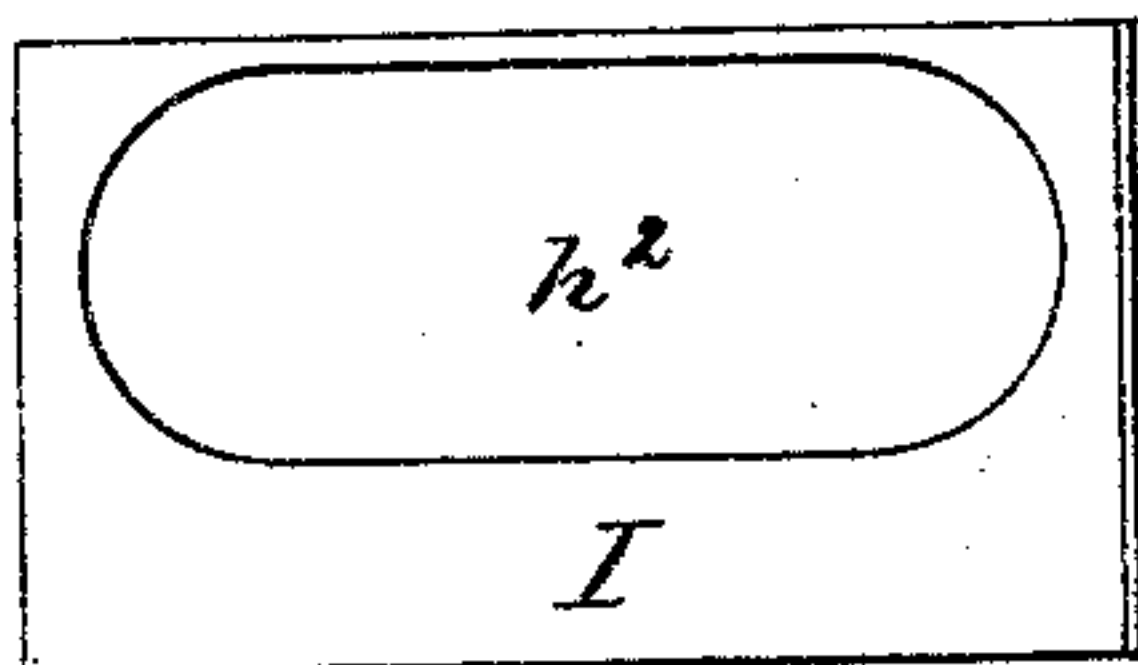


Fig. 7.

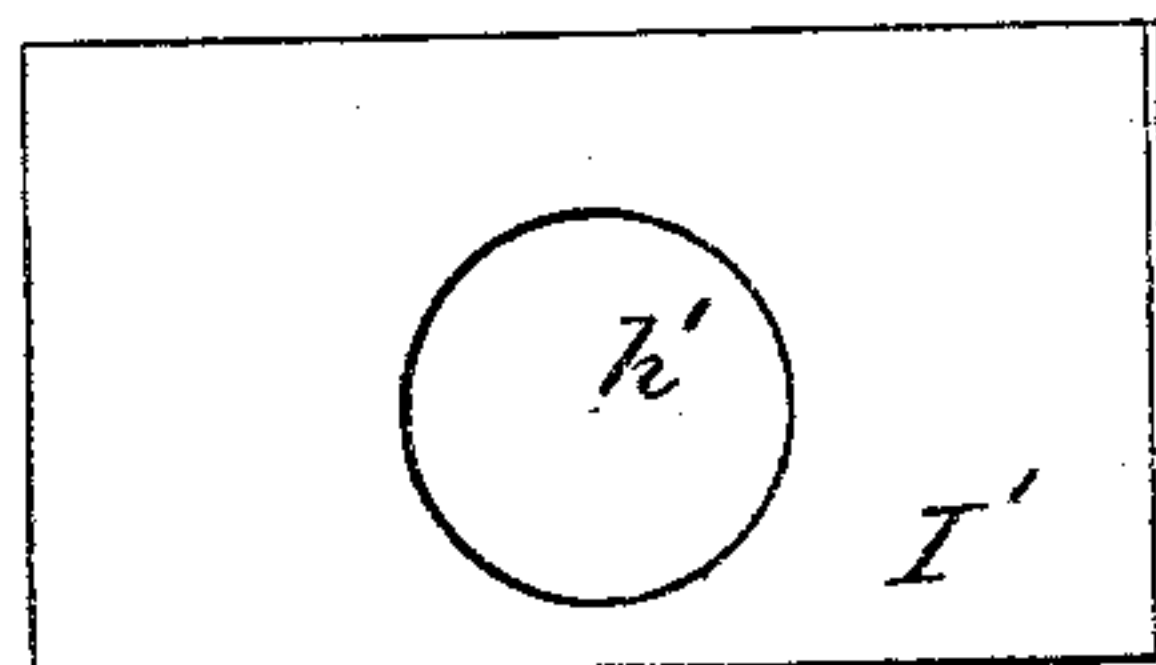


Fig. 9.

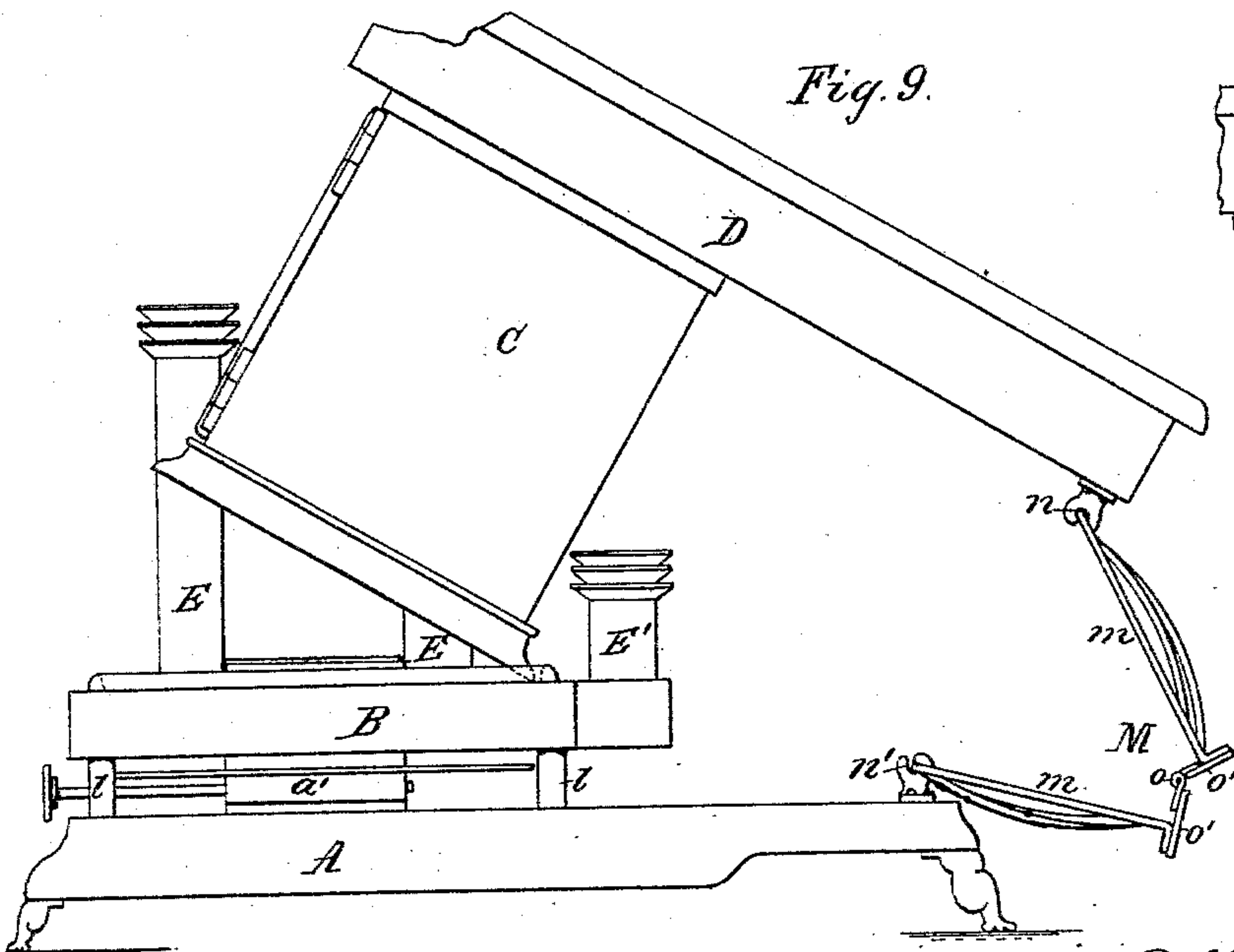
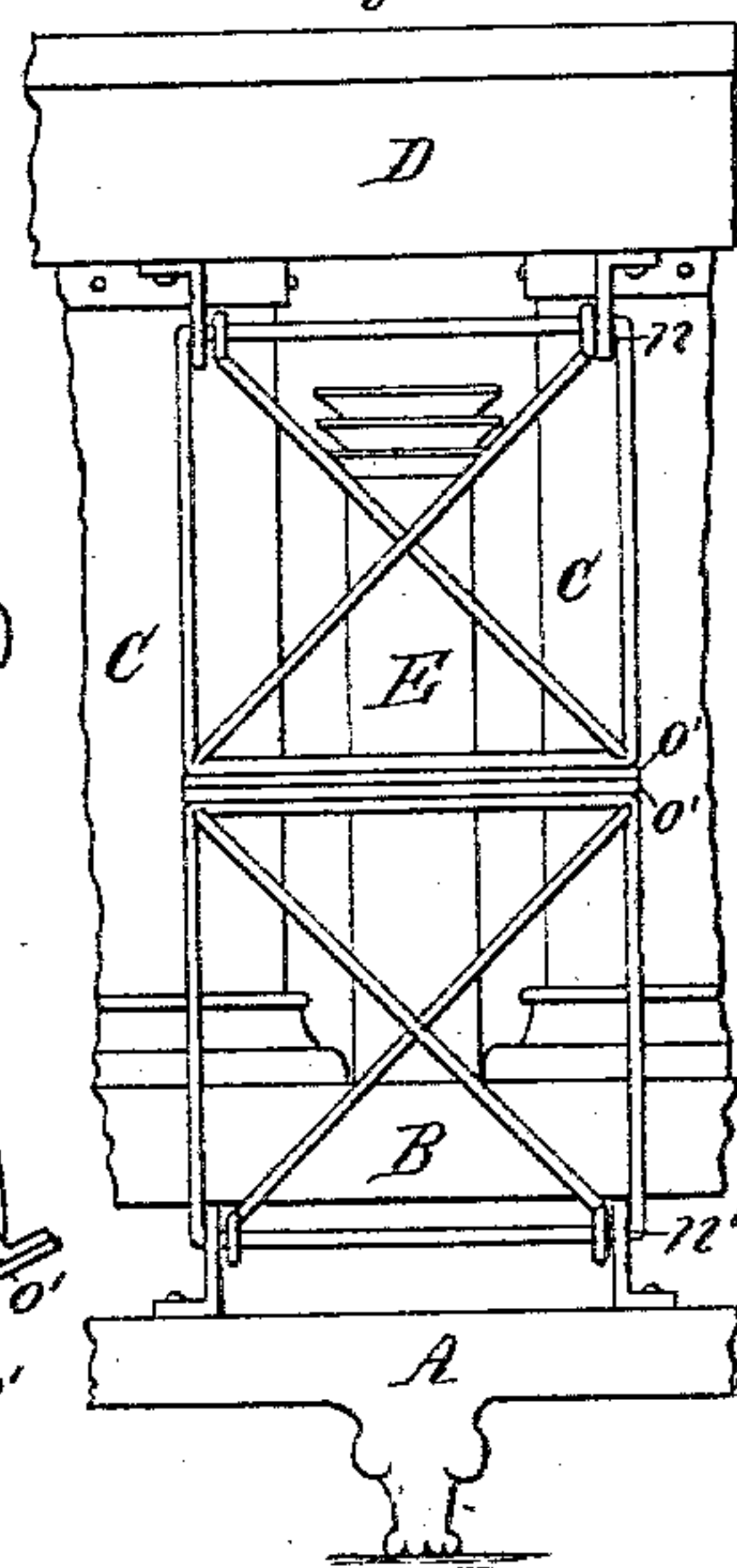


Fig. 8.



Theo. L. Popp  
Geo. E. Pittman } Witnesses.

Chas. T. Ham : Inventor.  
By Wilhelm & Bonner  
Attorneys.



# UNITED STATES PATENT OFFICE.

CHARLES T. HAM, OF ROCHESTER, NEW YORK.

## OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 300,601, dated June 17, 1884.

Application filed December 10, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES T. HAM, of the city of Rochester, in the county of Monroe and State of New York, have invented  
5 new and useful Improvements in Oil-Stoves, of which the following is a specification.

The object of this invention is to provide means for supporting the rear end of the movable top portion of the stove upon the base in  
10 a simple and convenient manner, which permits the rear end of the top portion to be readily lowered and the lower front portion to be raised for exposing the wicks, and furnishing an oven which can be used at desire  
15 over the elongated front portion or over the rear portion of the top of the stove.

My invention consists, to these ends, of the improvements which will be hereinafter fully set forth, and pointed out in the claims.

20 In the accompanying drawings, consisting of three sheets, Figure 1 is a longitudinal sectional elevation of a lamp-stove provided with my improvements. Fig. 2 is a horizontal section in line *x x*, Fig. 1. Fig. 3 is a vertical  
25 cross-section in line *y y*, Fig. 2. Fig. 4 is a sectional top plan view in line *x x*, Fig. 3. Fig. 5 is a longitudinal section showing the oven placed on the single hole in the rear part of the top of the stove. Figs. 6 and 7 are plan  
30 views of the removable bottoms which are used in connection with the oven. Fig. 8 is a rear elevation of the toggle-joint connection whereby the rear end of the top is supported. Fig. 9 is a side elevation of the stove with its  
35 upper part tilted backward.

Like letters of reference refer to like parts in the several figures.

40 A represents the base of the stove, provided with an oil-reservoir, *a*, and upwardly-projecting wick-tubes *a'*.

45 B represents the air-chamber surrounding the wick-tubes above the oil-reservoir, and *b* the burner-cones or deflectors formed on the plate *b'*, which closes the openings in the top of the air-chamber B, through which the wick-tubes project.

CC represent two flame-chambers arranged above the burners, the latter being arranged in two groups—one for each flame-chamber C.

50 D represents the top portion of the stove,

connecting both flame-chambers C C, and receiving the hot products of combustion therefrom.

EE' represent air-supply tubes by which the air necessary for the support of combustion is conducted to the air-chamber B. The tubes E are arranged in the air-space formed between the two flame-chambers C C, and open to the exterior air, whereby the tubes E are to a large extent protected against passing  
55 air-currents and enabled to supply air to the air-chamber B in a steady and uniform current. The tubes E' are arranged on the rear part of the air-chamber B, which projects rearwardly beyond the flame-chambers C C,  
60 and are made shorter than the tubes E, so as not to interfere with the backward movement of the upper part of the stove, which is necessary to expose the wicks. The air-tubes EE' are provided at their upper ends with deflectors or injectors, whereby passing air-currents are turned into the tubes and prevented from interfering with the proper flow of air to the  
65 burners necessary to support combustion.

F represents an elongated opening formed  
75 in the wide front portion of the top plate, D, of the stove, and G represents a single round opening formed in the contracted rear portion of the top plate, D, for the escape of the hot products of combustion from the top portion  
80 of the stove.

H represents the removable oven, which is adapted to be placed either over the elongated opening F or over the round opening G, as may be desired. For this purpose the oven is  
85 provided with removable bottoms I I', which may be attached to the oven by sliding them between ways *h*, formed on the lower portion of the oven. One of these removable bottoms is provided with a round hole, *h'*, and designed  
90 to be inserted in the oven when the latter is placed over the round hole G, and the other removable bottom is provided with an elongated hole, *h''*, and designed to be employed when the oven is placed over the elongated  
95 hole F.

J represents a diving-flue formed in the rear portion of the oven H, and opening into the same at its upper end, and extending downwardly beyond the bottom and rearwardly be-  
100



yond the rear wall of the oven, as represented at *j*. These lower projecting portions, *j*, of the diving-flue are adapted to fit under the top plate of the stove to close the passage leading from the front portion of the top to the exit-opening G for the hot products of combustion, as represented in Figs. 1 and 4, thereby compelling the hot gases from the flame-chamber to pass upwardly through the oven and then outwardly through this diving-flue J before they can escape through the opening G. The projecting portion of the flue J also serves to hold the oven on the stove when the oven is placed on the front portion of the top.

K represents a catch secured to the lower front portion of the oven, and adapted to engage under the top plate, D, of the stove, and to secure the oven on the top plate when the oven is placed on the circular opening in the rear part of the top, as represented in Fig. 5. When the oven is so arranged, the conical cover-support K is removed from the rear opening, G.

The air-chamber B is made separate from the base A, and rests upon the latter by feet *l*, formed on the air-chamber and engaging in sockets *l'* in the base.

The plates *b'*, on which the deflectors are formed, are secured to the lower ends of the flame-chambers, and rest upon the top plate of the air-chamber B, and fit between ribs or flanges formed on said top plate around the openings formed on the same for conducting the air to the burner.

M represents a toggle-joint connection, whereby the rear end of the top of the stove is supported on the rear portion of the base. This connection consists of two links, *m m*, pivoted or hung, respectively, to the lower side of the top of the stove at *n* and to the upper side of the base at *n'*, and pivoted to each other at *o*, where both links are provided with square contact-faces *o'*, which rest firmly against each other when the upper part of the stove stands in working position. Upon moving the connecting ends of the toggle-links *m m* backwardly, as represented in Fig. 9, the top portion of the stove, including the flame-chambers, turns on the rear lower edges of the flame-chambers as the axis thereof, raising the lower front portions of the flame-chambers from the air-chamber and exposing the wicks, which can now be trimmed, lighted, or otherwise manipulated, as may be desired. By a simple movement of the toggle-connection M in a re-

verse direction, so as to place the toggle-links in line with each other, the upper part of the stove is returned to its former position and securely held to the air-chamber.

I claim as my invention—

1. In an oil or lamp stove, a detachable oven constructed at its rear side with a diving-flue, having its lower portion projecting downwardly and rearwardly beyond the oven, and adapted to close the passage in the oil-stove leading from the flame-chamber to the outlet for the products of combustion, and to engage under the top plate of the stove, thereby securing the oven on the stove, substantially as set forth.

2. In an oil or lamp stove, a detachable oven adapted to receive bottom plates having openings of different shapes, whereby the oven can be placed over the elongated opening in the front of the stove-top or over the circular opening in the rear of the same, and its bottom opening made to coincide with either, substantially as set forth.

3. In an oil or lamp stove, a detachable oven provided with a catch, K, adapted to engage under the top of the oven, substantially as set forth.

4. The combination, with the base of the stove and a flame-chamber provided with a top extending rearwardly over the base and resting loosely on the base, so as to be capable of being tilted backward to expose the wicks, of a toggle-joint supporting in its extended upright position the overhanging rear portion of the top on the base, and permitting the rear portion of the top to be lowered and the front portion of the flame-chamber to be raised upon being folded together, substantially as set forth.

5. The combination, with the base A and a flame-chamber resting loosely on the base, and provided with a rearwardly-overhanging top, D, of the toggle-links *m*, connecting the overhanging rear portion of the top with the base, and provided with square contact-faces *o'*, which close against each other and support the top in a horizontal position when the links *m* are arranged perpendicularly, substantially as set forth.

Witness my hand this 28th day of November, 1883.

CHARLES T. HAM.

Witnesses:

JNO. DUNN, Sr.,  
P. L. SALMON.