

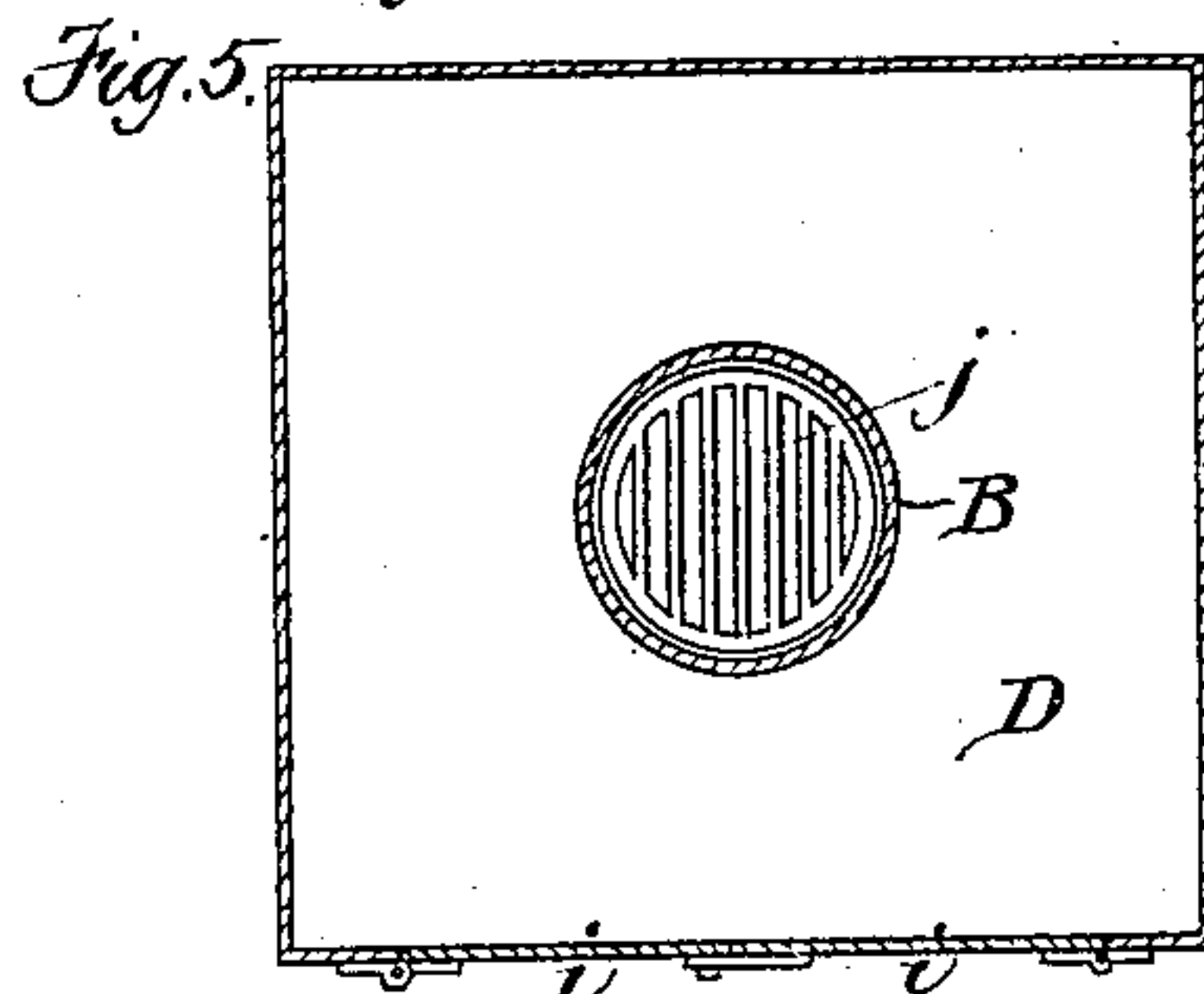
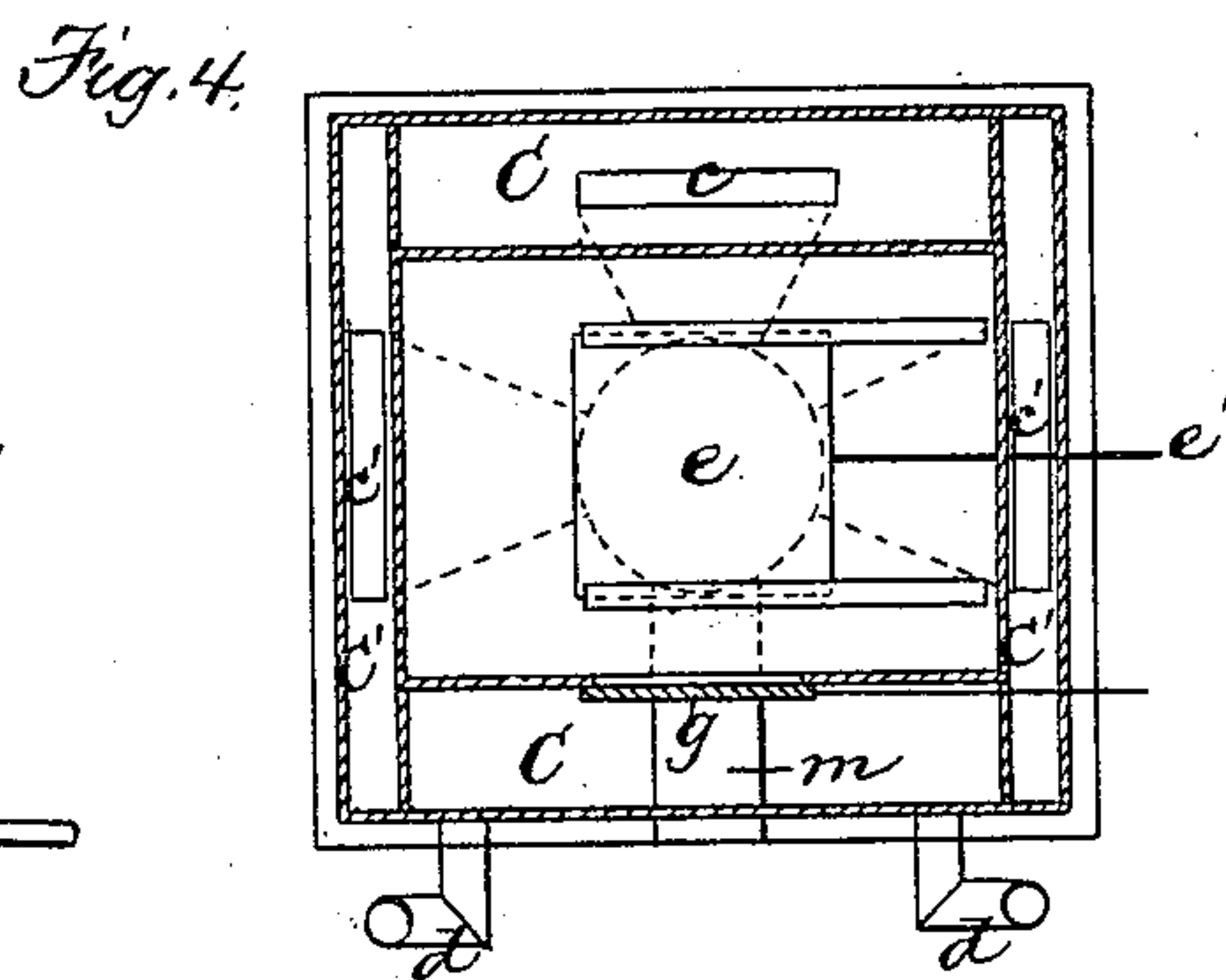
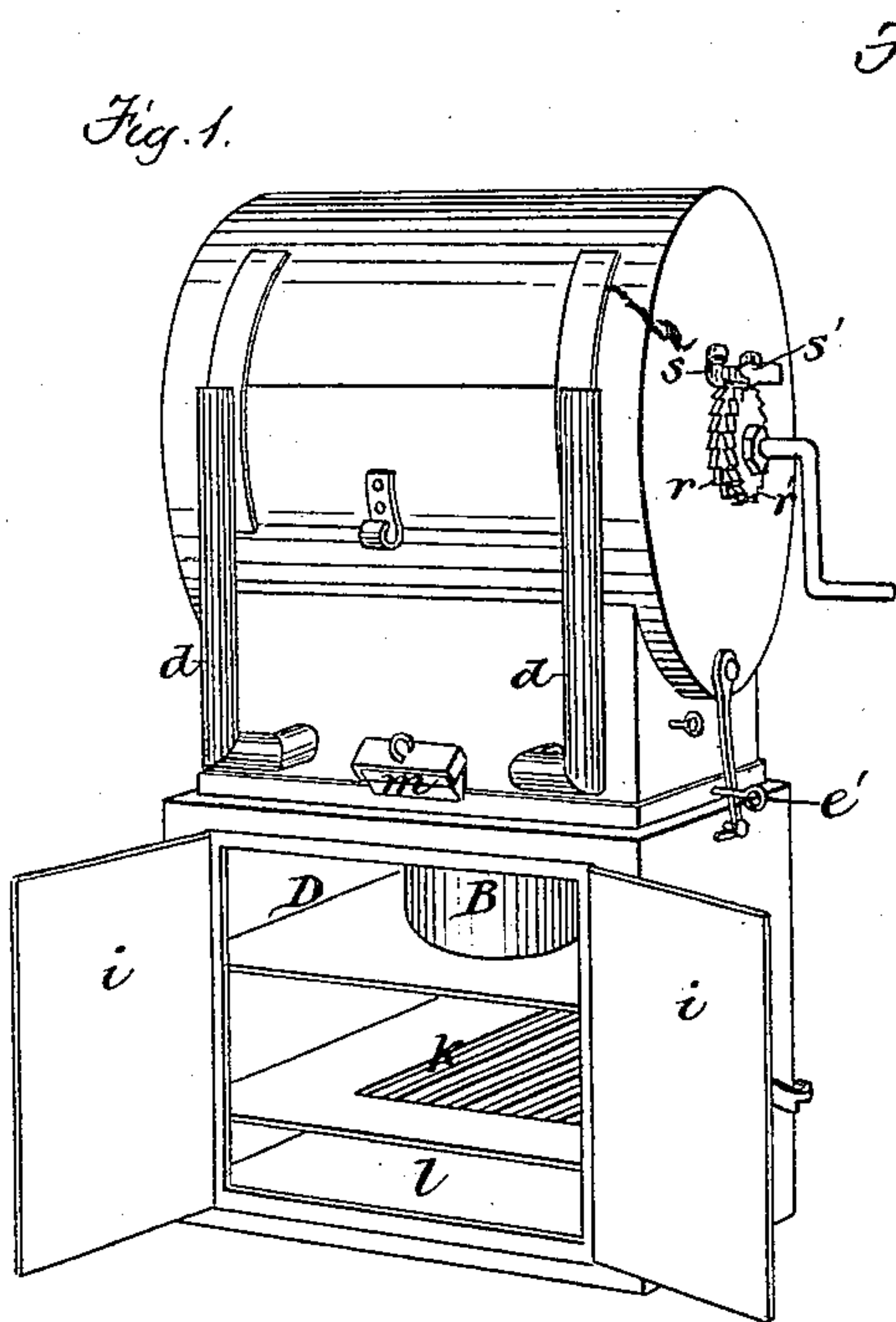
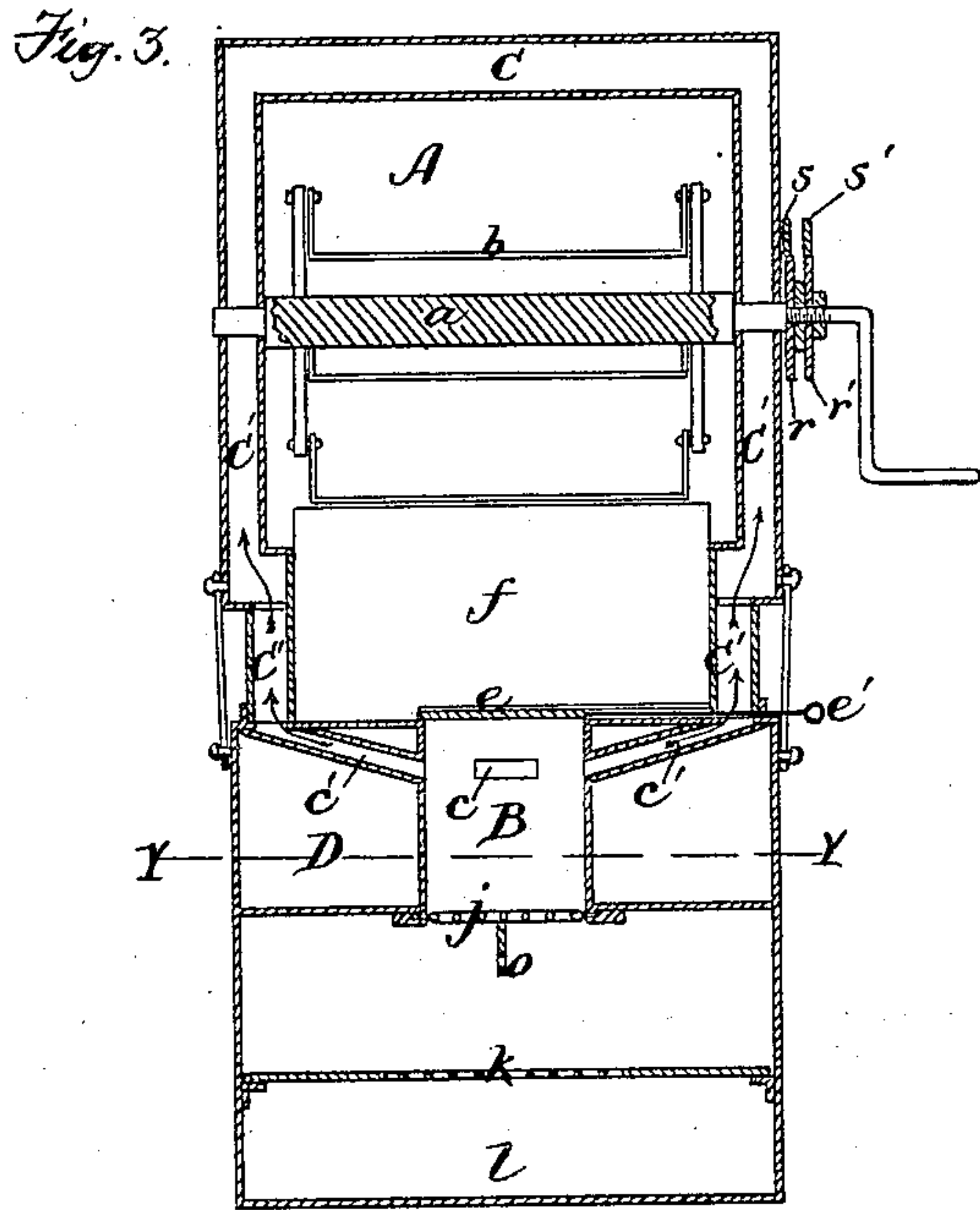
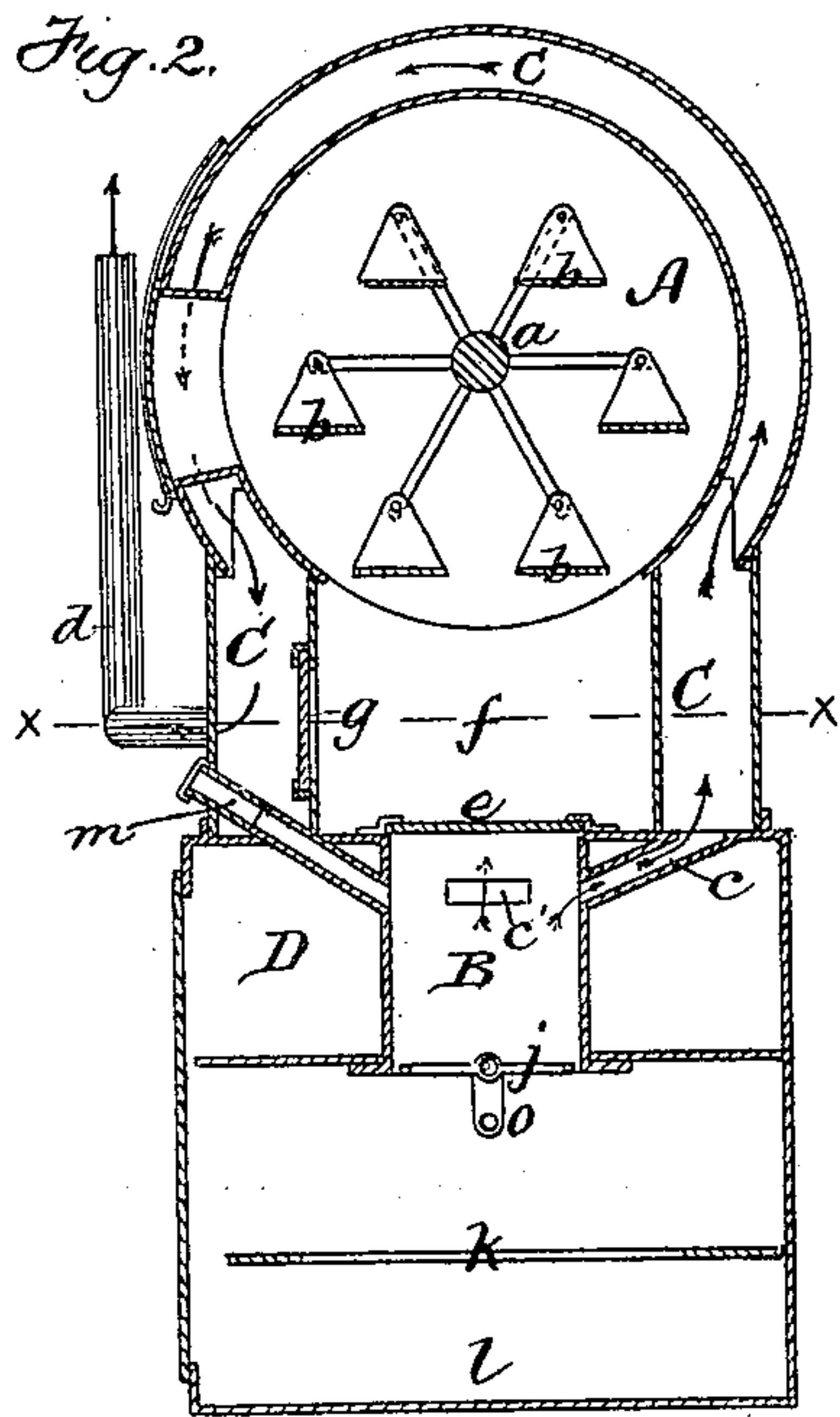
(No Model.)

T. HARRINGTON.

BAKER'S OVEN.

No. 258,416.

Patented May 23, 1882.



Witnesses.
Joseph Butler
A. L. White

Inventor
T. Harrington
by Wright & Brown
Attys

UNITED STATES PATENT OFFICE.

TIMOTHY HARRINGTON, OF BOSTON, MASSACHUSETTS.

BAKER'S OVEN.

SPECIFICATION forming part of Letters Patent No. 258,416, dated May 23, 1882.

Application filed December 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY HARRINGTON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Bakers' Ovens, of which the following is a specification.

This invention has for its object to provide a baker's oven adapted to utilize to the highest practicable degree all the heat furnished by the fuel consumed, and capable of being conveniently and economically managed.

To these ends my invention consists in the improvements which I will now describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view of an oven embodying my improvements. Fig. 2 represents a transverse vertical section of the same. Fig. 3 represents a longitudinal vertical section. Fig. 4 represents a horizontal section on line X X of Fig. 2. Fig. 5 represents a horizontal section on line Y Y, Fig. 3.

The same letters of reference indicate the same parts in all the figures.

In the drawings, A represents the oven proper, and B represents a fire-pot under the same. The oven is of cylindrical form and has journaled in its ends a shaft, *a*, having arms to which are pivoted the swinging shelves *b*.

C represents a flue, which communicates at one end through a smaller flue, *c*, with the fire-pot B, and extends upwardly therefrom over the oven A, and downwardly to one or more escape-pipes, *d*, which are connected to a chimney. (Not shown in the drawings.) The flue C is therefore adapted to conduct the products of combustion from the fire-pot around nearly the entire periphery of the oven, so that the heat will be utilized to the best advantage.

C' C' represent flues communicating with the fire-pot through smaller flues *c' c'*, and extending upwardly at the ends of the oven and communicating with the upper portion of the flue C. The products of combustion pass from the fire-pot through the flues C', heat the ends of the oven, and then enter the flue C and pass to the escape-pipes.

The fire-pot B is provided with a sliding top or cover, *e*, which is provided with a handle, *e'*, so that it may be drawn back to permit the

heated air and gases to pass directly upward from the fire-pot. The oven A is open at its bottom and communicates with the fire-pot (when the latter is open at its top) through the space *f*, inclosed by the inner walls of the flues C C', so that the oven may be directly and quickly heated from the fire-pot when the cover *e* is withdrawn. This may be done whenever it is desired to strongly increase the heat in the oven; but usually the cover *e* will remain closed and the products of combustion will pass through the flues C C'. I prefer to provide an opening in the inner wall of the flue C nearest the escape-pipes and cover said opening with a damper or slide, *g*. (See Figs. 2 and 4.) By opening the slides *e* and *g* the draft will be made more direct, the products of combustion passing from the fire-pot to the escape-pipes without passing through the main portion of the flue C. This will only be done when the fire is being started. The fire-pot is located in a casing, D, which is heated by radiation from the fire-pot, and may serve as a secondary oven, it being provided with doors *i i*. The fire-pot is provided with a tilting grate, *j*, below which is a sifting-grate, *k*, on which the contents of the fire-pot may be dropped. The grate *j* has a downwardly-projecting lug, *o*, whereby it may be tipped. Below the grate *k* is an ash-pit, *l*.

m represents a chute extending from the fire-pot to the outside of the casing D for the introduction of fuel to the fire-pot. Said chute is provided with a cover at its outer end.

The shaft *a* of the oven A is provided with a crank, and has rigidly attached to it two ratchets, *r r'*, one of which has its teeth formed oppositely to the other.

s s' represent pawls pivoted to the outer casing of the oven and adapted to engage respectively with the ratchets *r r'*. By the combined action of the ratchets *r r'* and pawls *s s'* the shaft *a* is held from rotating in either direction, so that it may be held at any desired point when its shelves are unequally loaded.

I claim—

1. In a baker's oven, the combination of the oven A, the fire-pot B under the oven, the flue C, surrounding the oven and arranged to conduct the products of combustion around the oven, as described, and the end flues, *c' C'*, con-

nected with the fire-pot and conducting the products of combustion upwardly along the ends of the oven into the flue C, as set forth.

2. In a baker's oven, the combination of the
5 oven A, containing the shelves, and having the lower extension, *f*, with the flue C, surrounding the oven, the fire-pot, and the slides or dampers *e g*, whereby the products of combustion may be caused to pass from the fire-pot di-
10 rectly through the extension *f* and into the flue C, without passing into the part of the oven containing the trays, substantially as described.

3. In a baker's oven, the combination of the
15 oven A, the fire-pot B under the oven, the flue C, surrounding the oven and arranged to con-

duct the products of combustion around the oven, as described, the end flues, *c' C'*, connected with the fire-pot and conducting said products of combustion upwardly along the
20 ends of the oven into the flue, and the slides or dampers *e g*, whereby direct communication can be had from the fire-pot to the flue C through the lower extension, *f*, of the oven, substantially as described. 25

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

TIMOTHY HARRINGTON.

Witnesses:

JOHN O'NEILL,
HENRY W. B. COLTEN.