

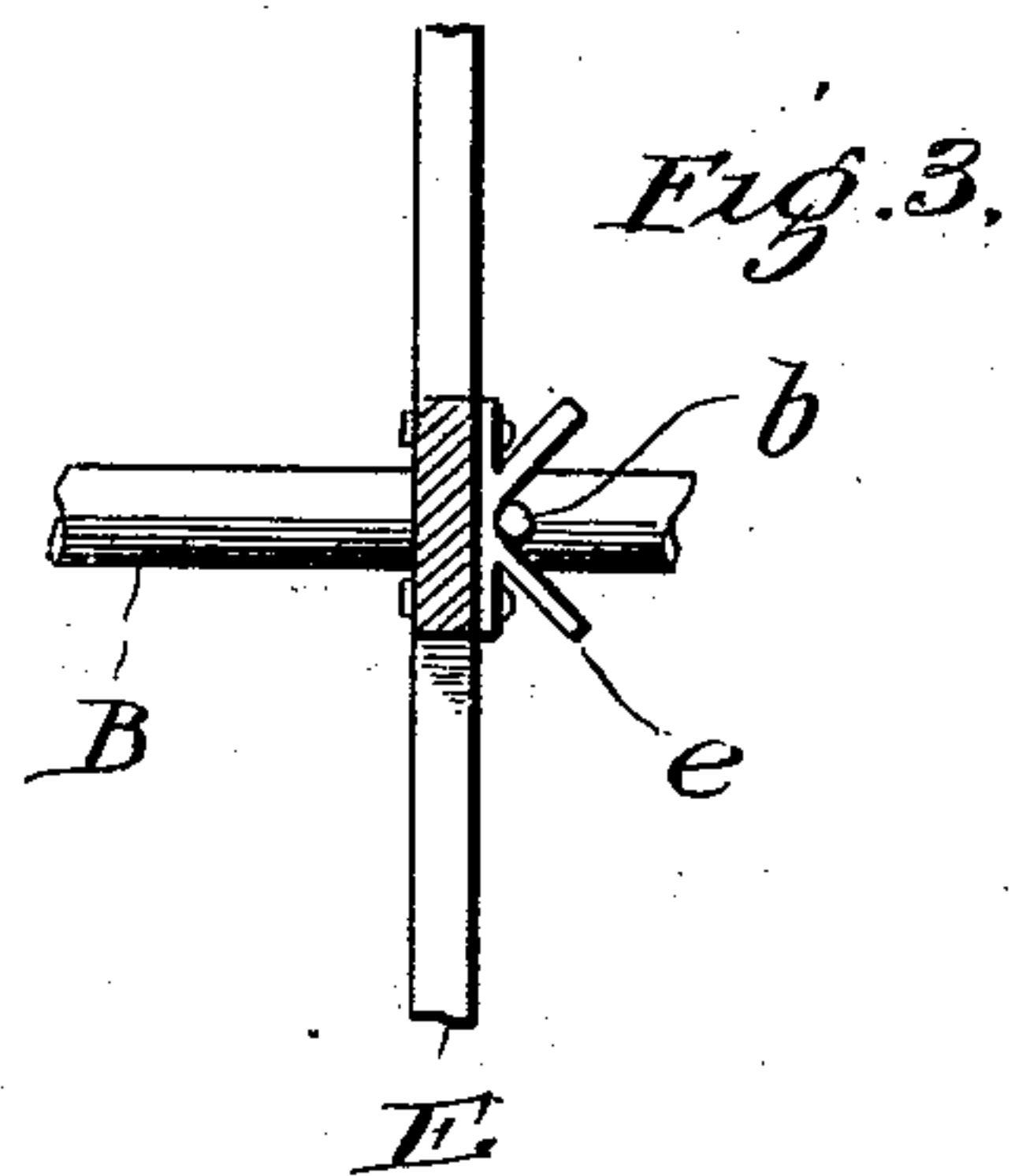
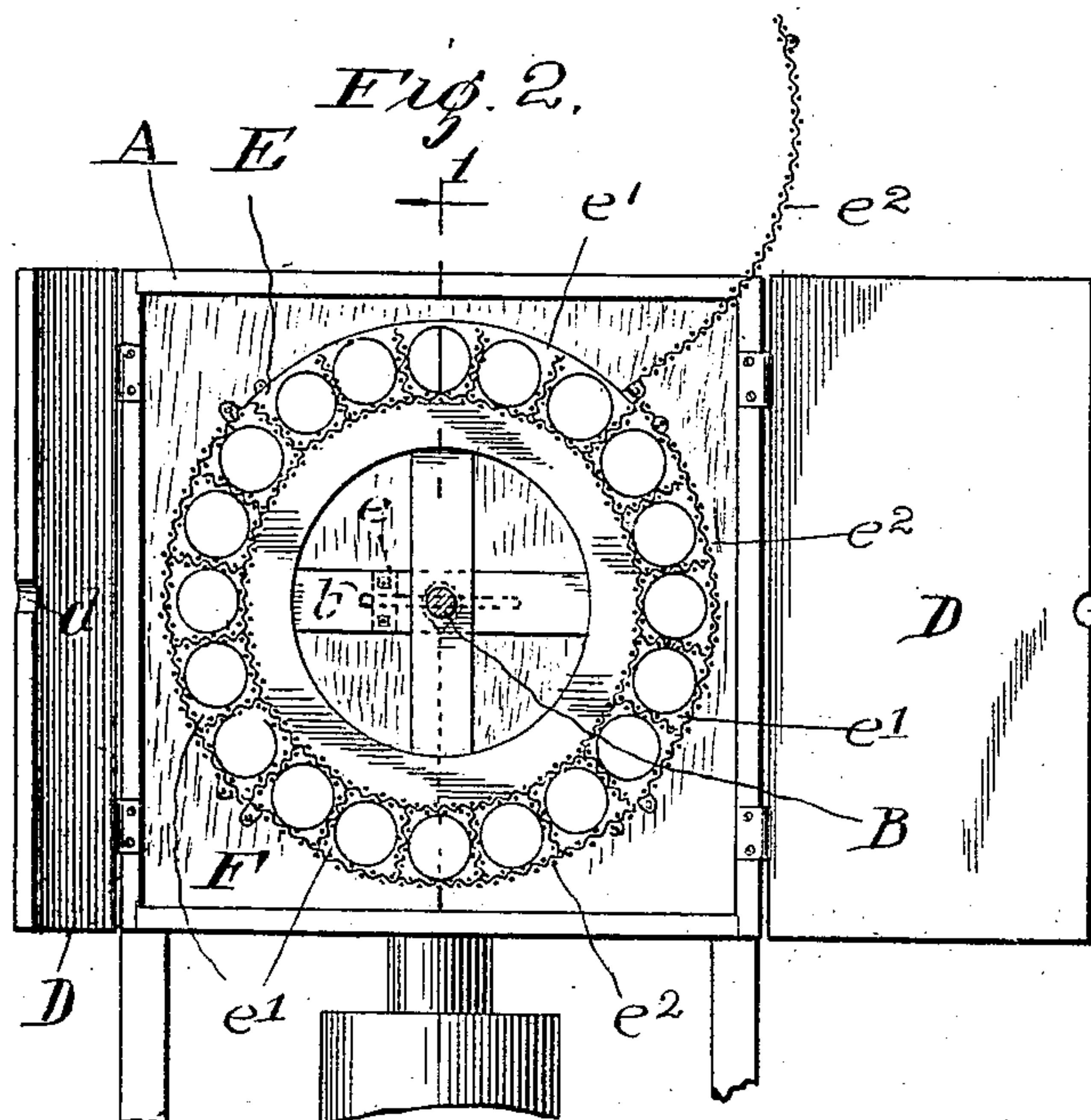
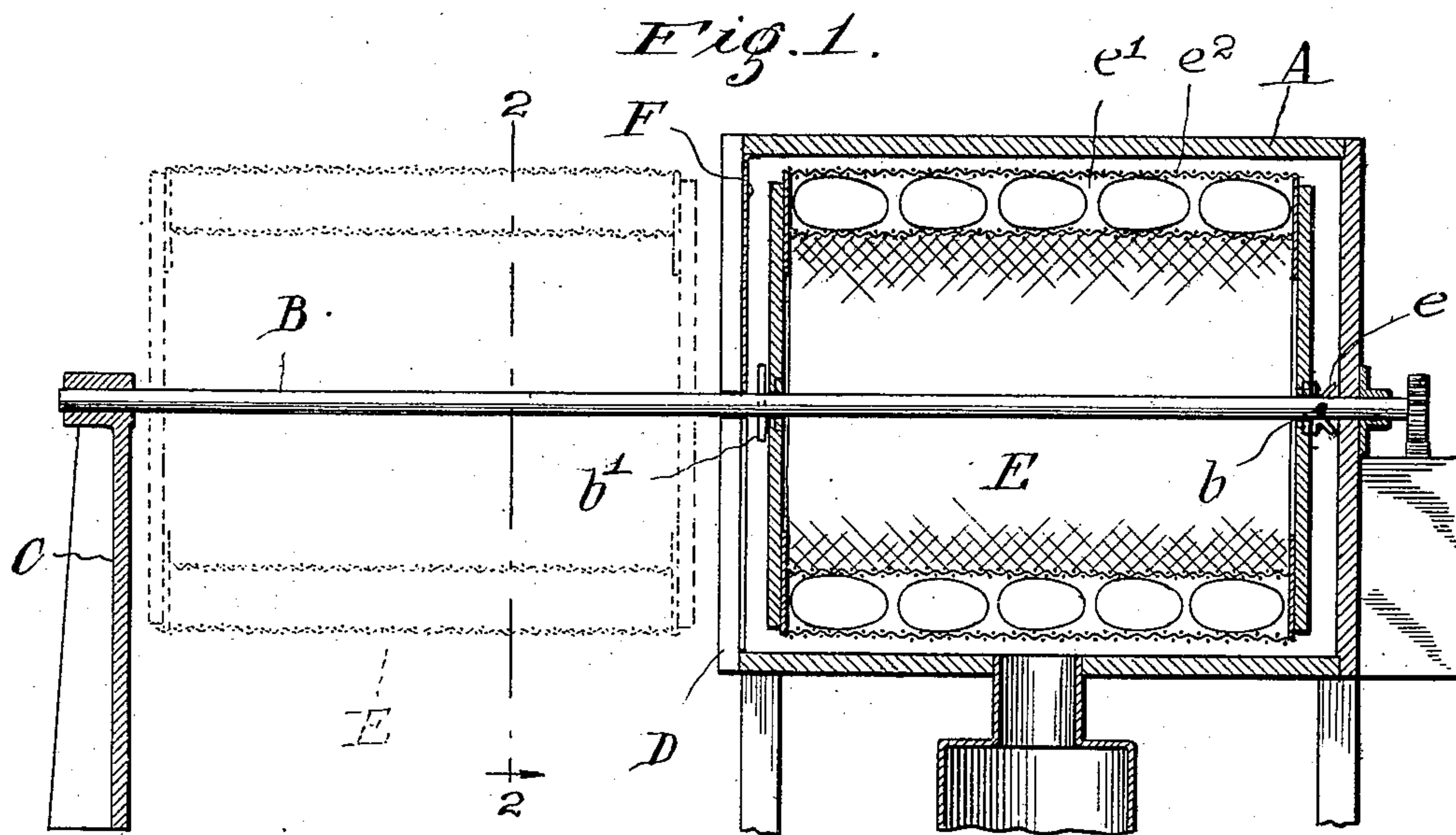
No. 855,871.

PATENTED JUNE 4, 1907.

H. W. AXFORD.

INCUBATOR.

APPLICATION FILED MAR. 12, 1906.



Witnesses:
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UNITED STATES PATENT OFFICE.

HARRIS W. AXFORD, OF CHICAGO, ILLINOIS.

INCUBATOR.

No. 855,871.

Specification of Letters Patent.

Patented June 4, 1907.

Application filed March 12, 1906. Serial No. 305,487.

To all whom it may concern:

Be it known that I, HARRIS W. AXFORD, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Incubators, of which the following is a specification.

My invention relates to improvements in incubators and is fully described and explained in this specification and shown in the accompanying drawings, in which

Figure 1 is a longitudinal section through my improved incubator; Fig. 2 is a section in the line 2—2 of Fig. 1, with the drum drawn out; and Fig. 3 is a detail view showing the construction of the device utilized for bringing the drum back to its original position on the shaft.

Referring to the drawings, A, are the walls of a suitable chamber adapted to be heated by any suitable means. Through the chamber extends a shaft, B, adapted to be rotated by a motor of any desired sort. The shaft, B, is preferably a little more than twice the length of the chamber and is journaled at one end in one of the end walls of the chamber, and at the other in a suitable journal, C. The chamber is closed at the end adjacent to the journal, C, by doors, D, which meet along a vertical line and are notched at *d*, (Fig. 2) to receive the shaft, B. Longitudinally movable upon the shaft, B, is an egg-holding drum, E. The drum has a number of egg trays or compartments, *e*¹, on its periphery which are closed by lids, *e*². This drum has at its rear end a V-shaped radial member, *e*, which is adapted to engage a pin, *b*, on the shaft, B, to prevent rotation of the shaft within the drum when the member engages the pin. The drum can be locked against longitudinal movement upon the shaft by means of a pin, *b*¹.

In the incubation of eggs, it is necessary not only to keep the eggs warm during the required period, but it is necessary also to cool the eggs from time to time. It is also desirable to expose the eggs, especially in the early stages of incubation. In this way the eggs which are useless for incubating purposes can be detected at this time and removed from the drum. Many of these eggs are still of commercial value and can be disposed of to advantage, instead of becoming spoiled by permitting them to remain in the incubator. To get the best results, all of the

eggs should receive uniform treatment. This is especially true in cooling them. I accomplish this by drawing the entire egg-drum out of the chamber, consequently exposing all of the eggs at once and for the same length of time. With my improved incubator, I merely swing open the doors, D, withdraw the pin, *b*¹, and slide the drum along the shaft to the position shown in dotted lines in Fig. 1, leaving it outside the heating chamber for the requisite time. The lid of one of the compartments may be opened in this interval and the eggs in said compartment subjected to inspection. The lid is then closed and the drum revolved bringing an adjacent compartment to the top. Inspection of the eggs in this compartment and in the remaining ones can be accomplished as before set forth. When returned to position the proper angular relation between the drum and shaft is brought about by the pin and V-shaped member. In order to keep the incubating chamber at the proper temperature while the drum is outside it, I hang at the end of the chamber a curtain, F, slotted at its lower end to pass over the shaft.

The device herein illustrated is particularly designed for use in practicing the method of my Patent Number 786,256 issued April 4, 1905; but it can obviously be used in other ways if desired.

I realize that considerable variation is possible in the details of this construction, without departing from the spirit of my invention; and I do not intend, therefore, to limit myself to the specific form herein shown and described.

I claim as new and desire to secure by Letters Patent:—

The combination with an incubating chamber, of a shaft passing therethrough and a drum carried by the shaft and adapted to be shifted along the shaft outside the chamber, and means for closing the incubating chamber after the removal of the drum to retain its heat.

In witness whereof I have signed the above application for Letters Patent at Chicago, in the county of Cook and State of Illinois, this 5th day of March A. D. 1906.

HARRIS W. AXFORD.

Witnesses:

CHARLES O. SHERVEY,
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