

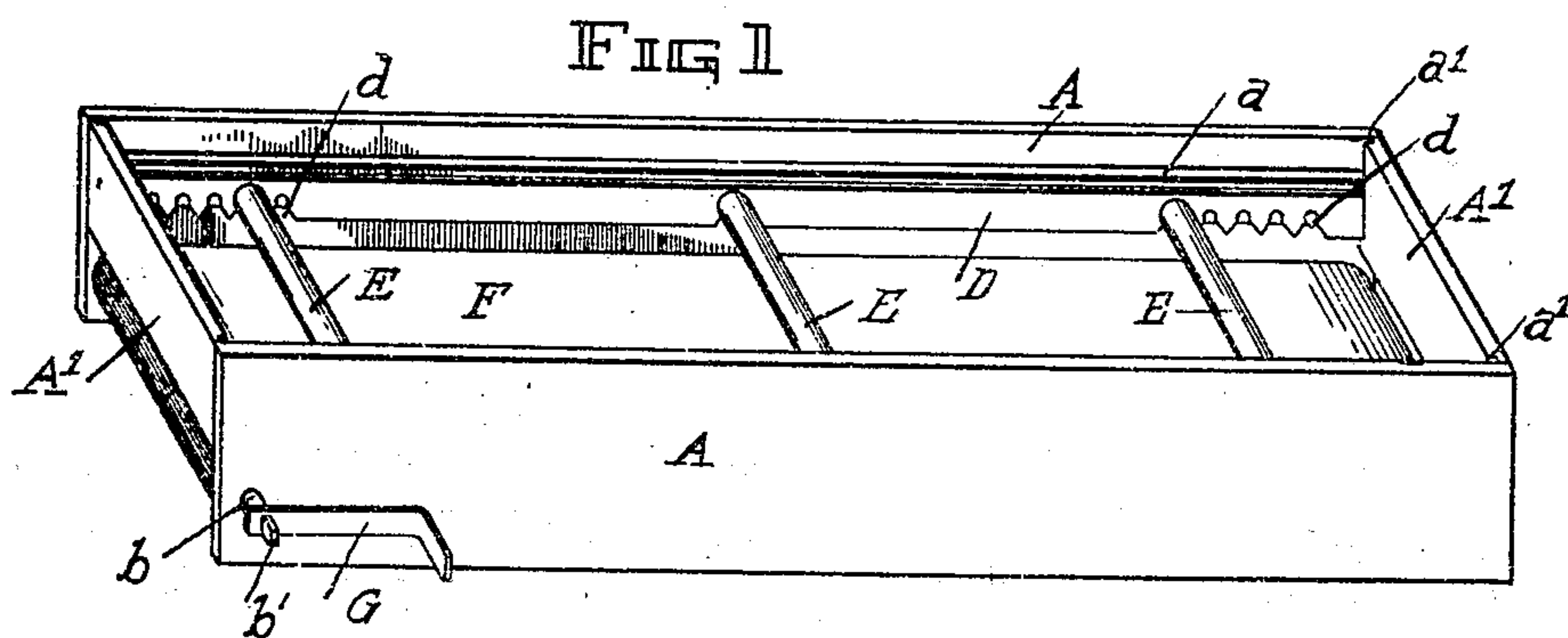
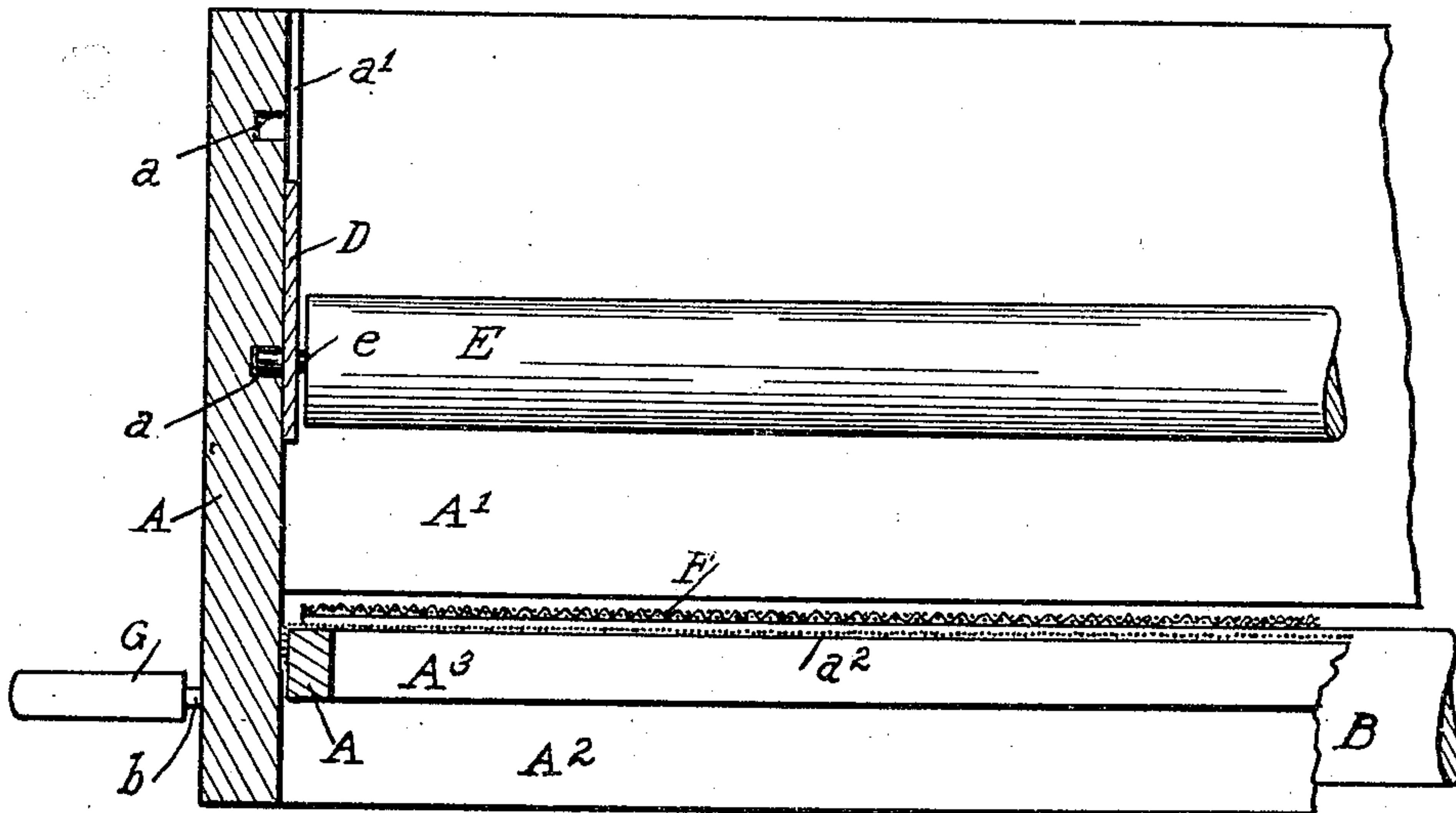
No. 868,162

PATENTED OCT. 15, 1907.

F. T. DIRKSEN.
EGG TURNER FOR INCUBATORS.

APPLICATION FILED JAN. 21, 1907.

2 SHEETS—SHEET 1.



Witnesses
O.A. Merkel.
J.A. Boyce

Inventor
FRANK T. DIRKSEN
By Att'y. N. DuBois.

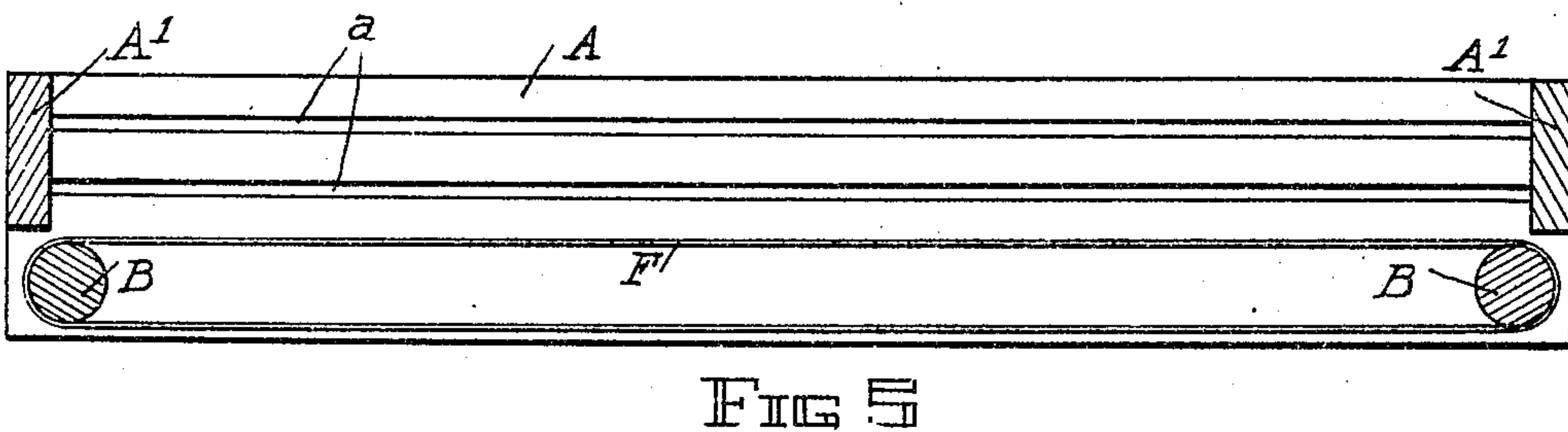
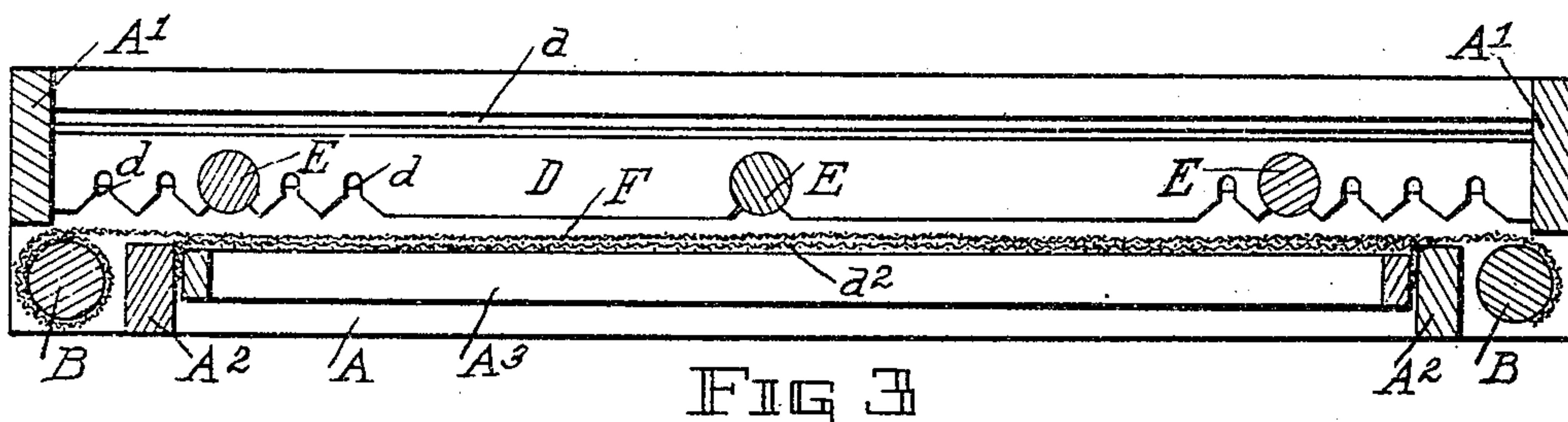
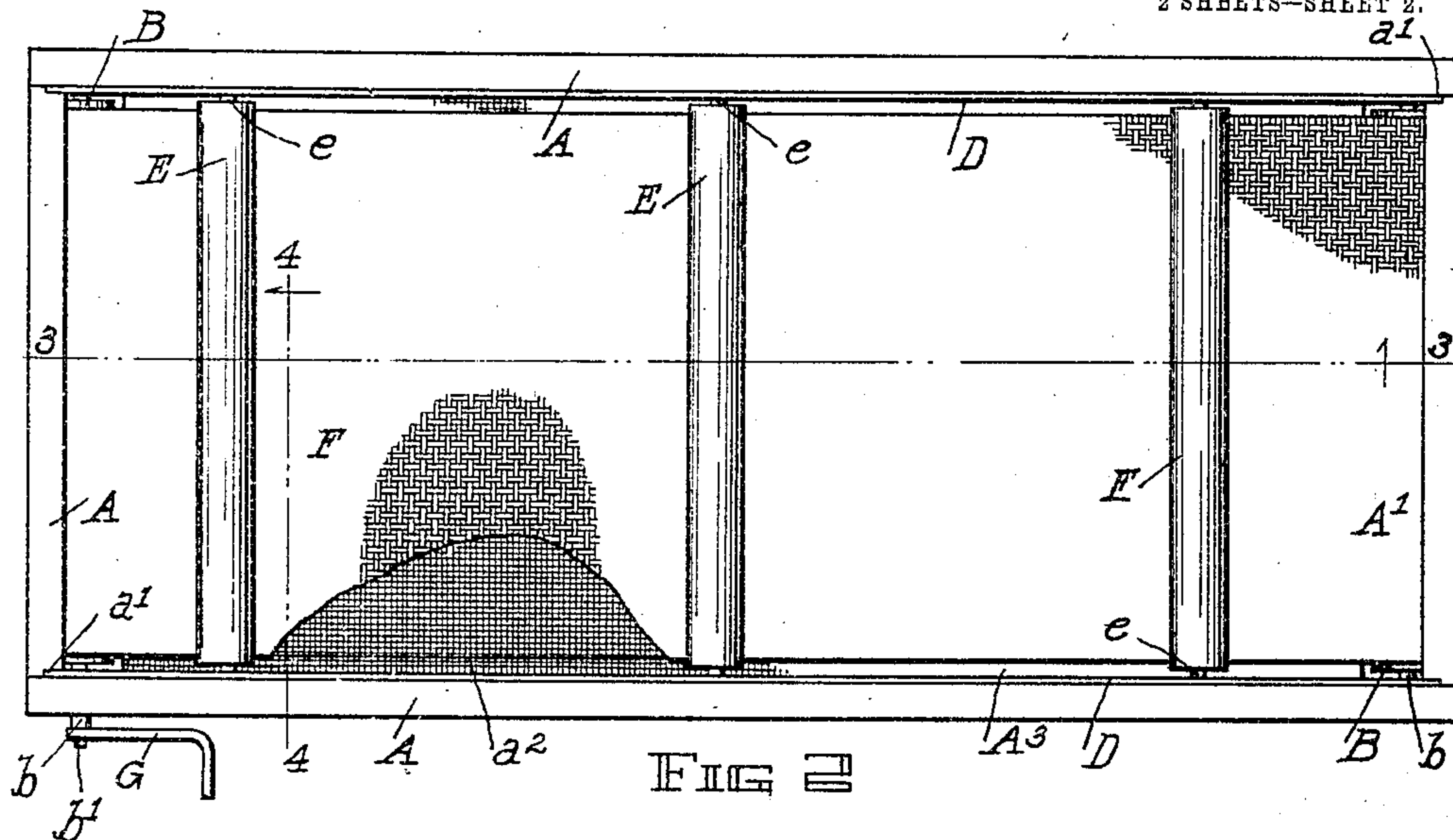
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By Atty. N. DuBois.

UNITED STATES PATENT OFFICE.

FRANK T. DIRKSEN, OF SPRINGFIELD, ILLINOIS.

EGG-TURNER FOR INCUBATORS.

No. 868,162.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed January 21, 1907. Serial No. 353,255.

To all whom it may concern:

Be it known that I, FRANK T. DIRKSEN, a citizen of the United States, residing at Springfield, in the county of Sangamon and State of Illinois, have invented a certain new and useful Egg-Turner for Incubators, of which the following is such a full, clear, and exact description as will enable others skilled in the art to make and use my said invention.

The purpose of this invention is to provide means for mechanically turning, without the necessity for handling, all of the eggs contained in the incubator drawer.

With these ends in view my invention consists in the novel features of construction and combinations of parts shown in the annexed drawings and hereinafter particularly described and finally recited in the claims.

Referring to the drawings, in which similar reference letters designate like parts in the several views: Figure 1. is a perspective view of an incubator drawer equipped with the improvements herein set forth. Fig. 2. is an enlarged top plan of an incubator drawer equipped with the egg-turning devices. Fig. 3. is a vertical longitudinal section on the line 3. 3 of Fig. 2. Fig. 4. is an enlarged partial, vertical, transverse section on the line 4. 4. of Fig. 2; and Fig. 5. is a vertical longitudinal section illustrating a modified construction of the apparatus.

The drawer is preferably of wood and has side pieces A and end pieces A¹ and cross pieces A² connected in any suitable manner with the side pieces A.

The side pieces A have parallel longitudinal channels a.

Saw-cuts a¹ at the junctures of the cross pieces A¹ with the side pieces A accommodate the ends of the guide plates D.

The guide-plates D consists of metal strips having notches d which accommodate the spindles e of the rollers E.

Rollers E, preferably of wood have spindles e which pass through the notches in the guide-plates and fit loosely in the channels a.

Each of the side pieces A has two channels a to admit of placing the rollers at different heights above the screen frame to adapt the rollers for turning eggs of different sizes.

Wire netting a² is stretched on a screen frame A³ which is suitably secured to the cross pieces A².

Horizontal rollers B have pivots b which turn in holes in the side pieces A and the pivots have squared parts b¹ which accommodate a crank G used in turning the rollers B.

Burlap F or other suitable meshed fabric, is secured to the rollers B and the fabric may be caused to move lengthwise of the drawer and above the screen frame by turning the crank G to wind the fabric onto the right hand or the left hand roller as the case may be.

The rollers E turn freely in the channels a and may

be set in different notches d to suit the number of eggs contained in the drawer.

In practice the rollers E will be spaced to accommodate the desired number of eggs between the rollers 60 and when it is desired to turn the eggs the crank G will be turned to move the fabric lengthwise of the drawer and the moving of the fabric will cause uniform turning of the eggs.

I have shown and described the fabric as situated 65 above and sliding upon the screen, one end of the fabric E being connected with one of the rollers B and the other end being connected with the other roller B, but it is obvious that an endless fabric F' traveling on the rollers B may be used without departure from my invention, the other structural features being substantially unchanged. 70

If small eggs are placed in the drawer the rollers E will be mounted in the lower channels a, and if larger eggs are placed in the drawer the rollers will be mounted 75 in the upper channels a.

In order to set the rollers E in any desired position it is only necessary to withdraw the plates D from the cuts a¹ sufficiently to permit the withdrawal of the spindles e from the notches d, whereupon the position 80 of the rollers relative to each other may be changed as desired and the plates replaced in the notches.

The operation of the apparatus is obvious from the foregoing description.

Having fully described my invention what I claim 85 as new and desire to secure by Letters Patent is:

1. The combination of a drawer, rollers revoluble within the drawer, means for supporting the rollers at different heights within the drawer and a movable egg-turning device cooperating with the rollers. 90

2. A drawer having longitudinal channels in the sides of the drawer and saw-cuts in the ends of the drawer adjacent to the ends of said channels, notched plates fitting in the saw-cuts of the drawer and rollers within the drawer having spindles adapted to turn in the notches of 95 the plates and the channels of the drawer.

3. The combination of a drawer having side pieces having longitudinal channels and end pieces having saw-cuts adjacent to the ends of the channels in the side pieces, a screen mounted within the drawer, notched plates fitting 100 in the saw-cuts of the drawer, rollers turning in the notches of the plates and the channels of the drawer and a fabric movable between said rollers and the screen.

4. The combination of a drawer equipped with mountings adapted to support parallel rollers at different distances apart within said drawer; rollers supported on said mountings and revoluble within said drawer and adjustable relative to each other to fit eggs of different sizes; and a movable apron supporting and adapted to turn eggs 105 situated between said rollers. 110

In witness whereof I have hereunto subscribed my name at Springfield Illinois this 15th day of January 1907.

FRANK T. DIRKSEN.

Witnesses:

O. A. MERKEL.