

(No Model.)

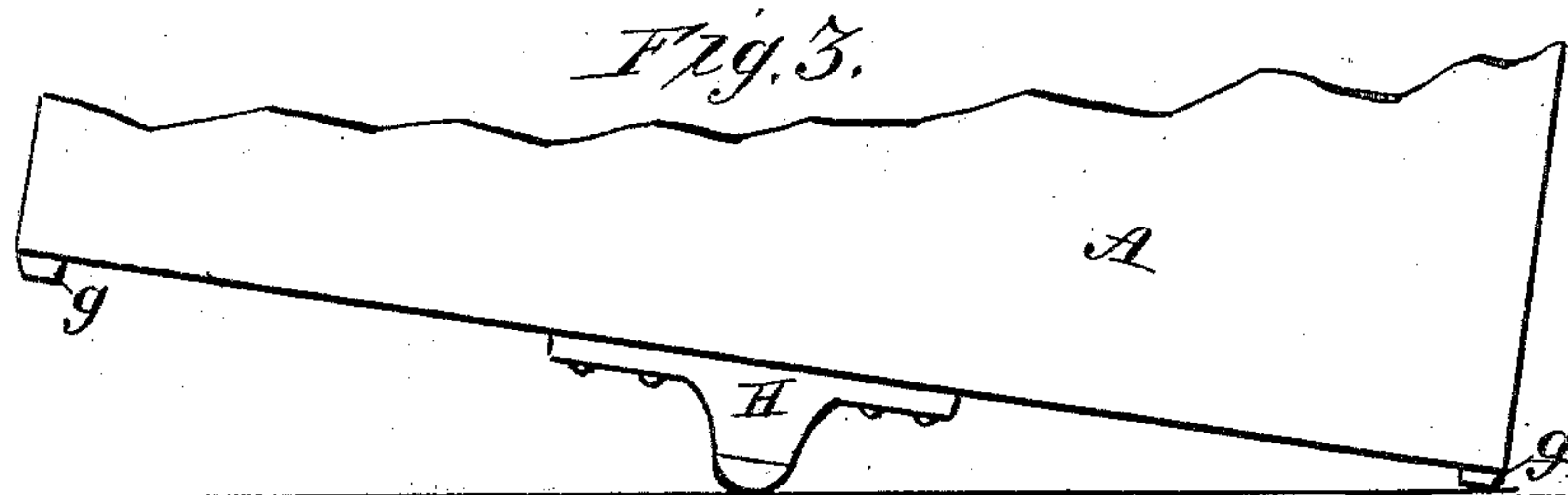
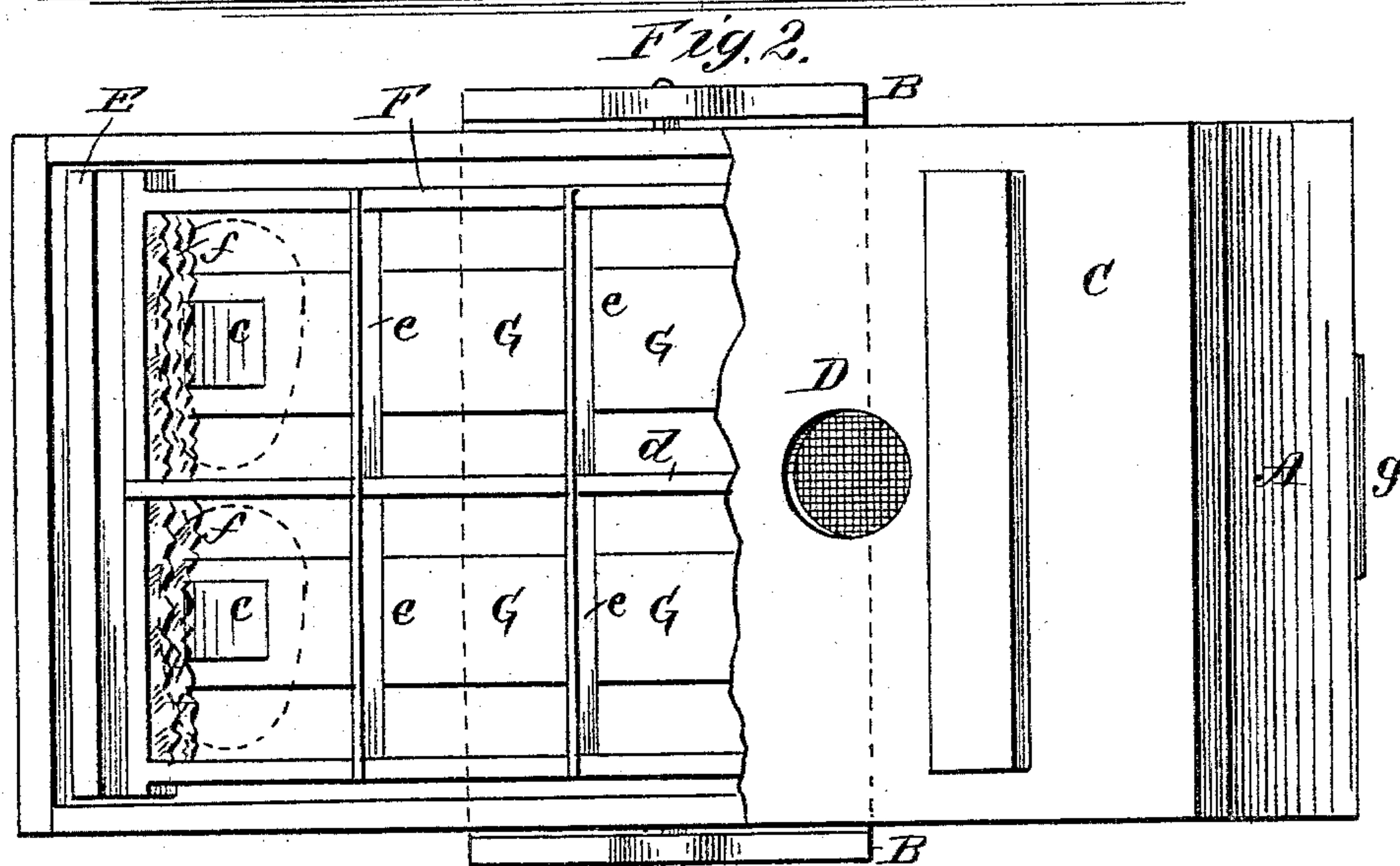
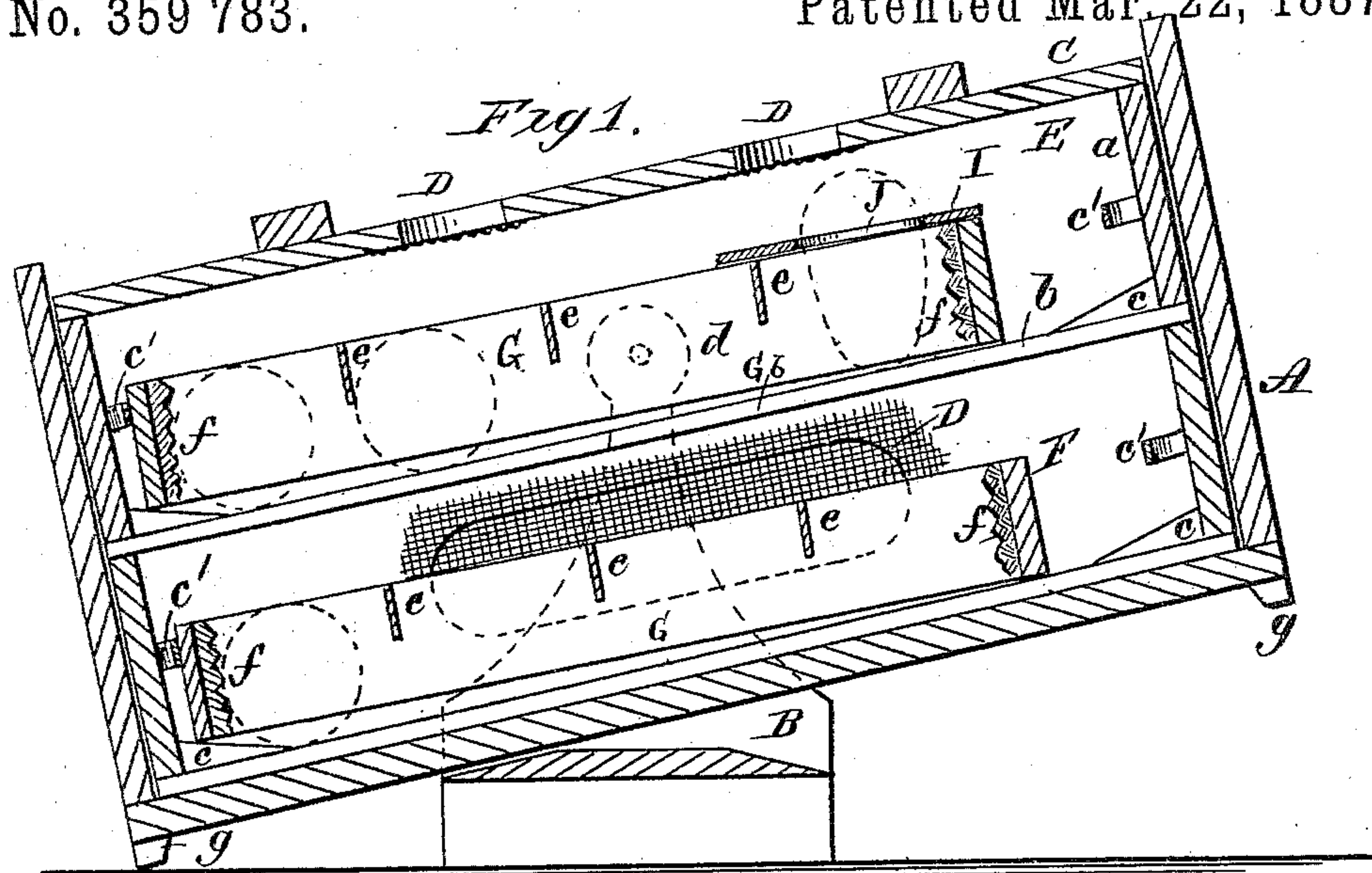
2 Sheets—Sheet 1.

L. A. HAPGOOD.

APPARATUS FOR PRESERVING EGGS.

No. 359 783.

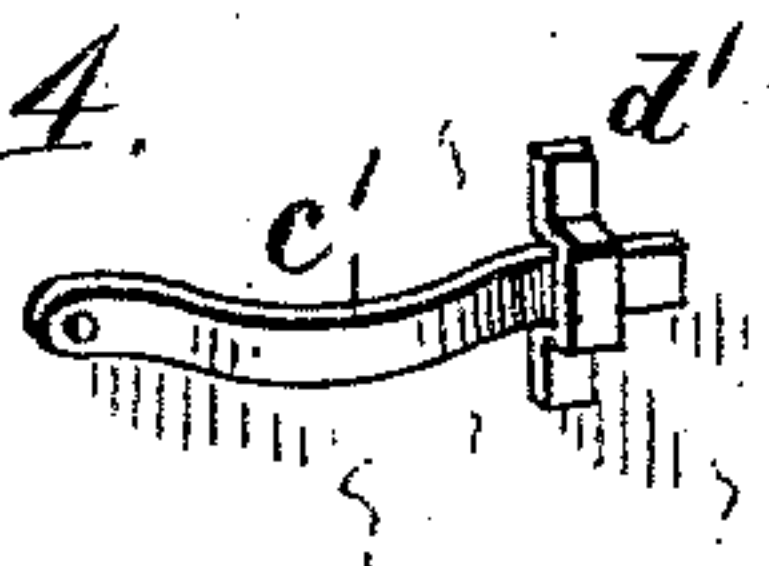
Patented Mar. 22, 1887.



WITNESSES:

J. D. Garfield
 & Sedgwick

Fig. 4.



INVENTOR:

L. A. Hapgood

BY

ATTORNEYS.

(No Model.)

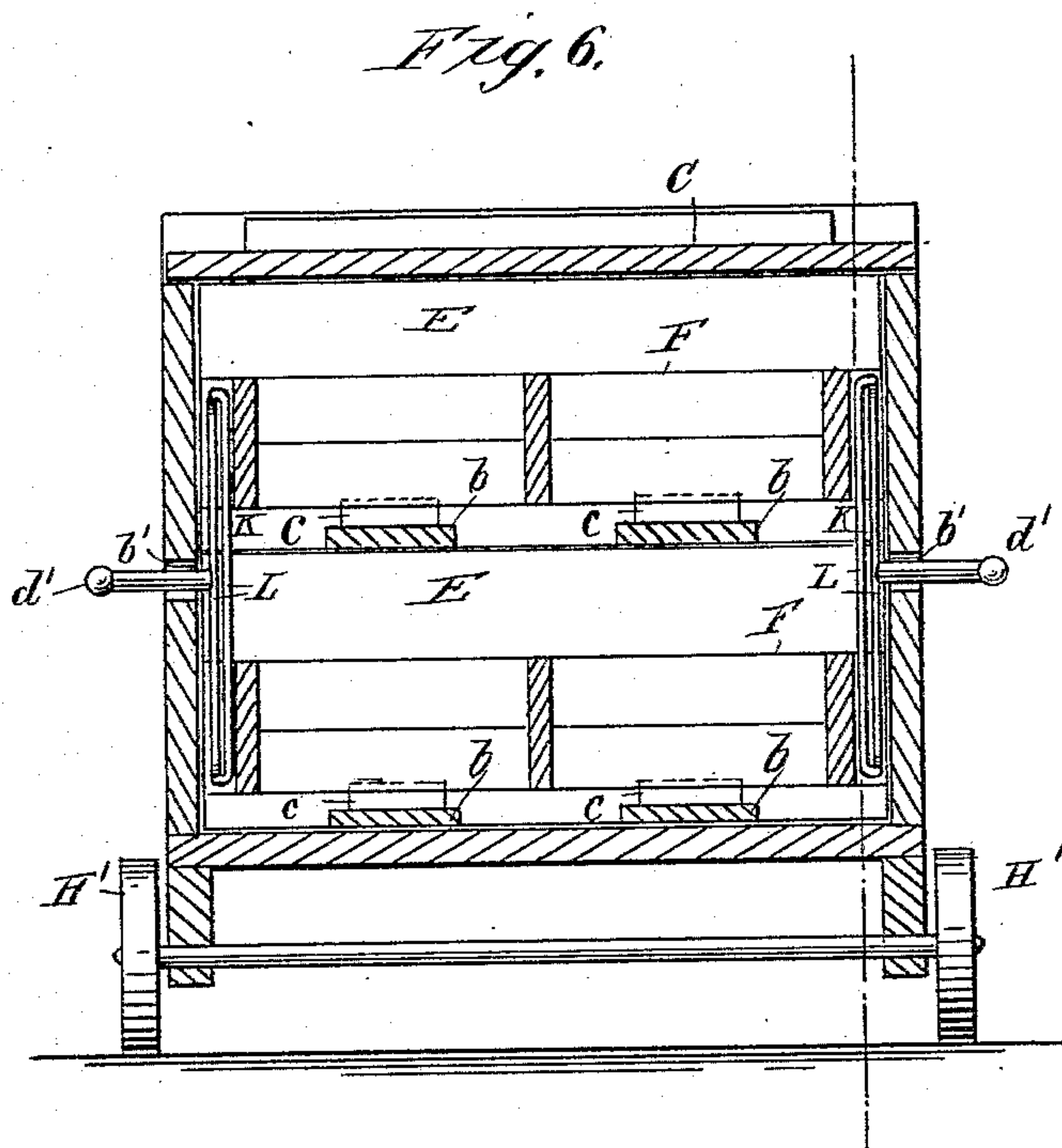
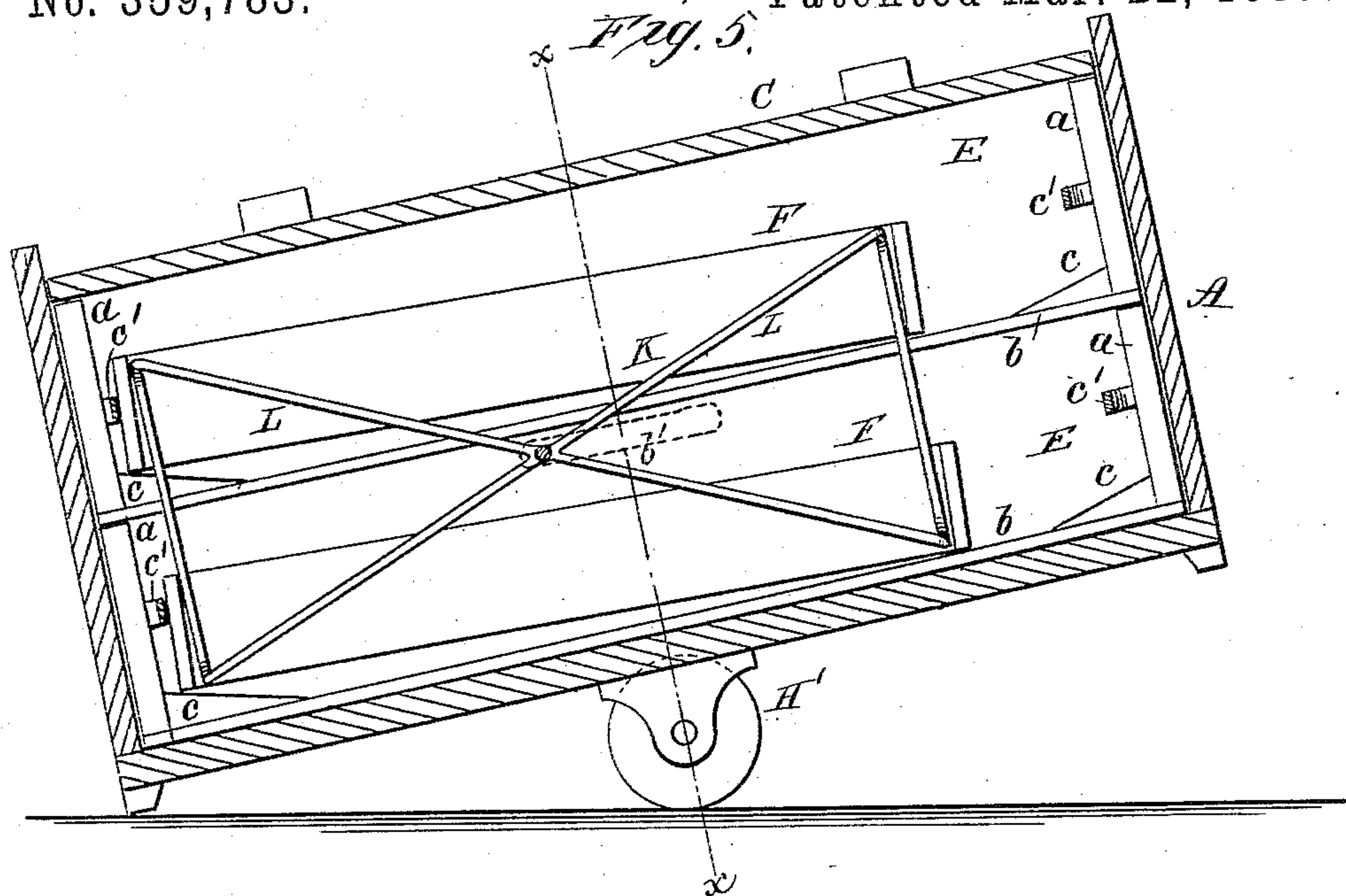
2 Sheets—Sheet 2.

L. A. HAPGOOD.

APPARATUS FOR PRESERVING EGGS.

No. 359,783.

Patented Mar. 22, 1887.



WITNESSES:

J. D. L. Larfield
C. Sedgwick

INVENTOR:

L. A. Hapgood

BY

Munn & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

L. ADELLE HAPGOOD, OF RANDOLPH, NEW YORK.

APPARATUS FOR PRESERVING EGGS.

SPECIFICATION forming part of Letters Patent No. 359,783, dated March 22, 1887.

Application filed July 19, 1886. Serial No. 208,422. (No model.)

To all whom it may concern:

Be it known that I, L. ADELLE HAPGOOD, of Randolph, in the county of Cattaraugus and State of New York, have invented a new and Improved Egg Case and Turner, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a vertical longitudinal section of my improved egg case and turner. Fig. 2 is a plan view with a portion of the top broken away to show the internal construction. Fig. 3 is a partial side elevation of a modified form, and Fig. 4 is a detail perspective view of one of the buffer-springs. Figs. 5 and 6 are respectively transverse and longitudinal sections of a modified form.

Similar letters of reference indicate corresponding parts in the different figures of the drawings.

The object of my invention is to construct a simple and effective device for containing eggs for storage or shipment and for turning them to insure their preservation.

My invention consists in a tilting case containing trays made of slats, in which are fitted compartmented frames made shorter than the trays and arranged to slide therein.

It also consists in yielding cushions at the ends of the trays for preventing the breaking of the eggs as the trays are shifted.

It also consists in inclined planes arranged at the ends of the trays for arresting the motion of the frames as they are shifted by the tilting of the case.

It further consists in the combination, with the frames, of apertured boards or sheets of pasteboard for holding the eggs in a fixed position during shipment.

The case A, which is made of wood or other suitable material, is pivoted in standards B, which support the case a short distance above the floor. To the top of the case is fitted a removable cover, C, and the top and sides of the case are provided with ventilating-apertures D, covered with wire-cloth to exclude rats, mice, and insects.

To the case A are fitted trays E, formed of end pieces, *a*, and slats *b*. At the ends of the trays, in the angle between the end pieces, *a*, and slats *b*, are secured inclined planes *c*. To each tray E is fitted a frame, F, divided lon-

gitudinally by one or more partitions, *d*, and transversely by thin yielding partitions *e*, extending from the top of the tray downward to a point about midway between the top and bottom of the tray. The partitions *e*, together with the longitudinal partitions *d*, divide the frame into the compartments G, in which are received the eggs to be preserved or shipped. The frames F are made shorter than the trays E, so that when the case A is tilted the frames F will slide on the slats *b* of the trays a sufficient distance to permit the eggs contained in the compartments G to make a half-revolution. The motion of the frames F is checked by the inclined planes *c* and the buffer-springs *c'*. The buffer-springs *c'* are secured to the end pieces, *a*, of the trays E at one end, the free ends of the springs being inclosed by loops *d'*, secured to the ends of the trays.

The inner surfaces of the frames F are provided with a covering, *f*, of granulated cork or similar material, to prevent the breakage of the eggs when the frames are shifted, and the partitions *e*, being of a yielding nature, bend slightly when struck by the eggs in the operation of shifting, thereby avoiding breakage.

To the top of each frame F is fitted a sheet, I, of heavy pasteboard, provided with a perforation, J, above each compartment G, having about the diameter of an egg of the average size, so that eggs may be inserted in the apertures of the pasteboard and extend into the compartments G. This device is employed only when it is desired to ship the eggs.

Instead of mounting the case A on pivots, as described, I place rounded legs H under the middle of the case at opposite sides; or I may extend a rib across the under surface of the case in lieu of the legs; or I may support the case on wheels H', as shown in Fig. 5. The ends of the case are provided with soft-rubber buffers *g*, for preventing severe shocks to the case when its end strikes the floor in the operation of tilting.

The eggs contained by the frame F require turning once in twenty-four hours, and the turning is effected by tilting the case in the manner already described.

In Fig. 5 and 6 I have shown a casing, A, having slots *b'* in opposite sides thereof, and

have placed between the outer sides of the frames F and the inner surfaces of the sides of the trays E wire frames, each formed of two triangular loops having their apices joined in the center of the case and secured to a handle, *d'*, projecting through the slot *b'* in the side of the casing A.

By means of the engagement of the ends of the wire frames with the ends of the frames F, when one frame begins to move the other is made to move with it, and, if desirable, both frames may be moved simultaneously by means of the handles *d'*.

I am aware that egg-cases have been constructed with trays adapted to be tilted. I am also aware that sliding trays are old, and I do not broadly claim the same as of my invention.

In my application filed August 20, 1886, Serial No. 211,447, I have shown a construction of egg-case in which the compartmented frames slide on slotted strips or slides running longitudinally of the case and concaved on their

upper surfaces, and these features I do not claim in this application.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with an egg-case provided with a central transverse support, on which the case is adapted to be tilted, of slatted trays, and compartmented frames seated in said trays and of a length less than the length of the trays, substantially as herein shown and described.

2. The combination, with the tilting case A, of trays E, fitted to the case and provided with inclined planes *c*, and the compartmented frames F, arranged to slide in the trays E, substantially as shown and described.

L. ADELLE HAPGOOD.

Witnesses:

J. W. DAVIS,

A. D. HAPGOOD.