

No. 771,707.

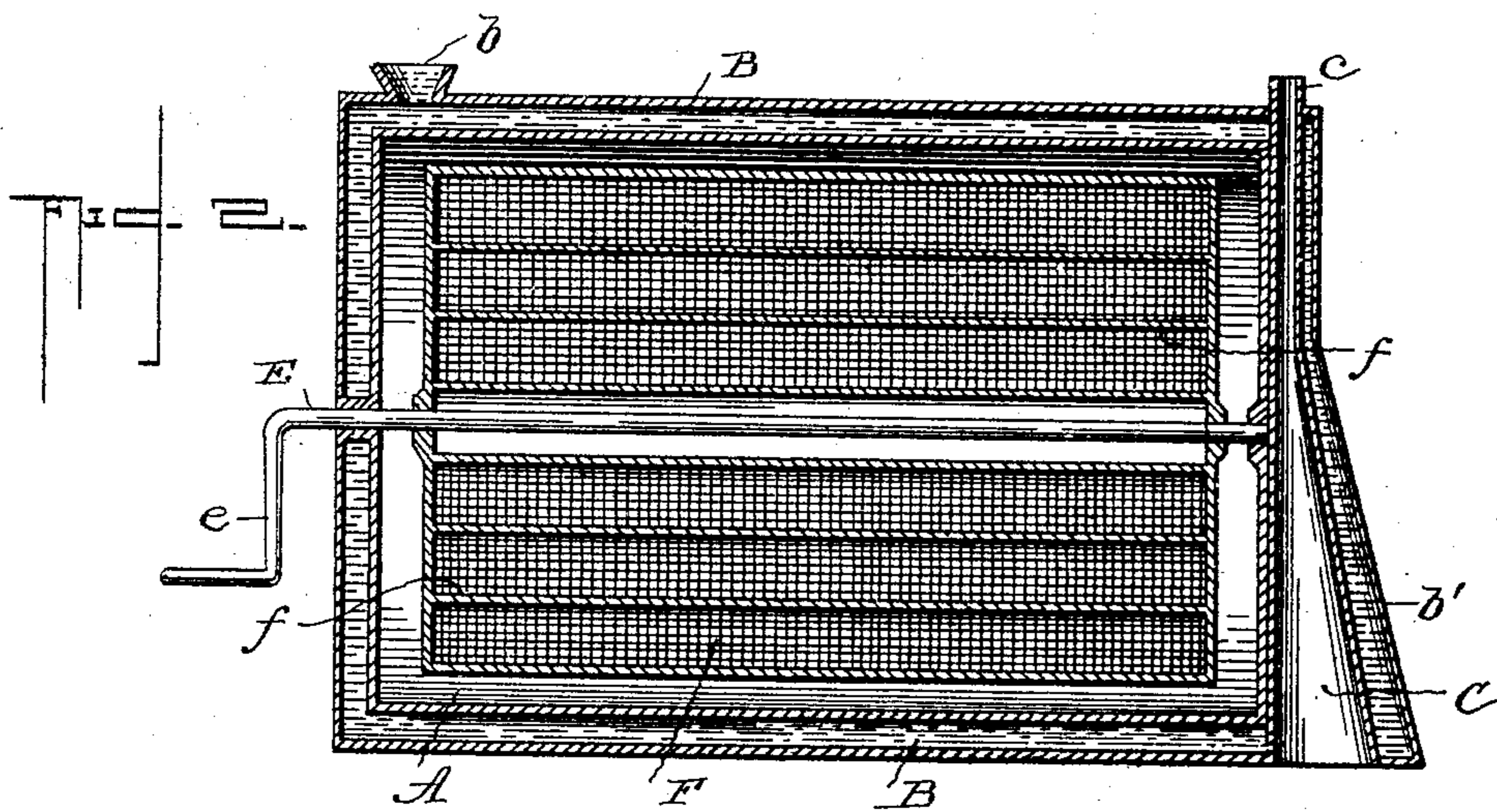
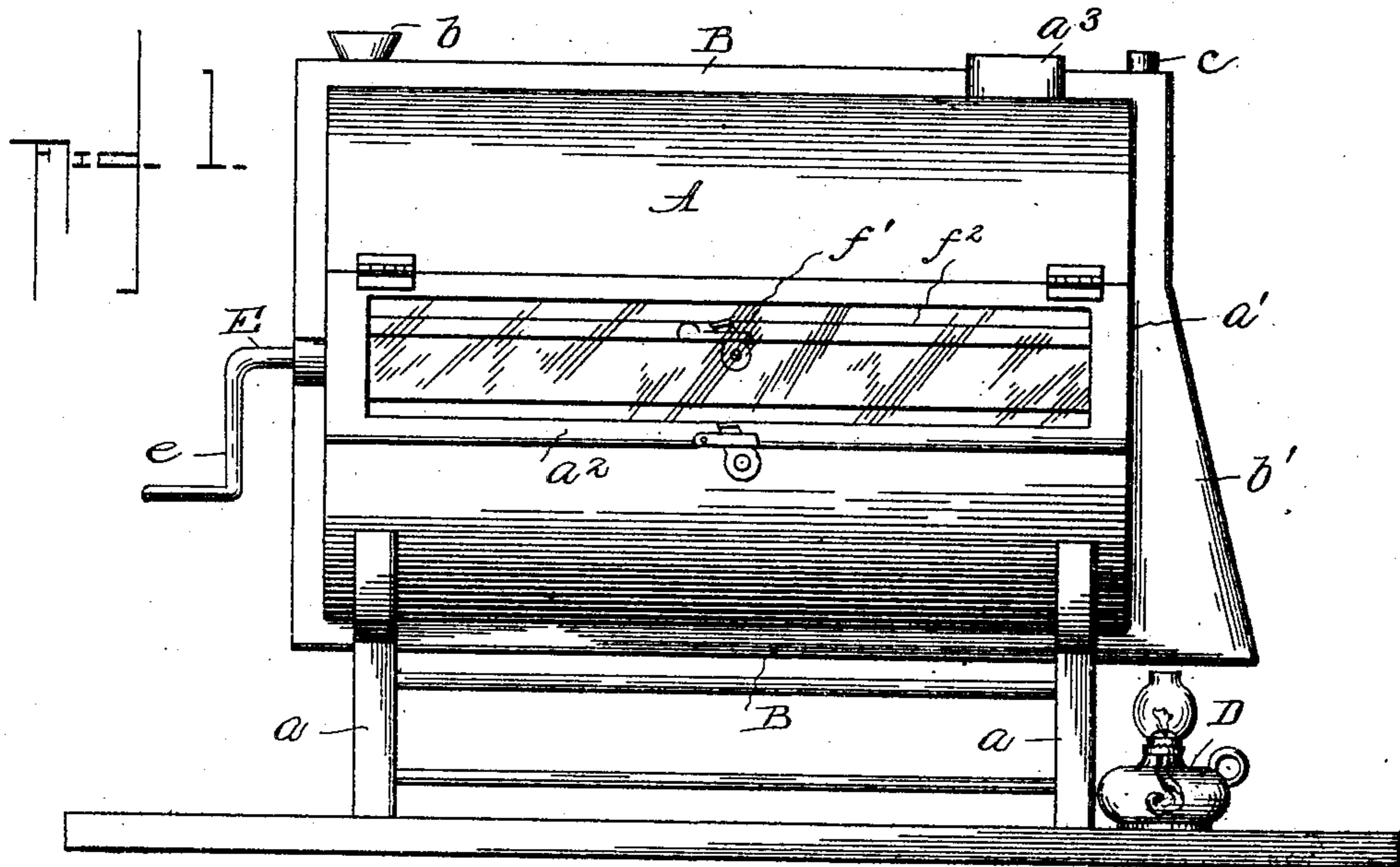
PATENTED OCT. 4, 1904.

J. BURGER.
INCUBATOR.

APPLICATION FILED OCT. 21, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:—
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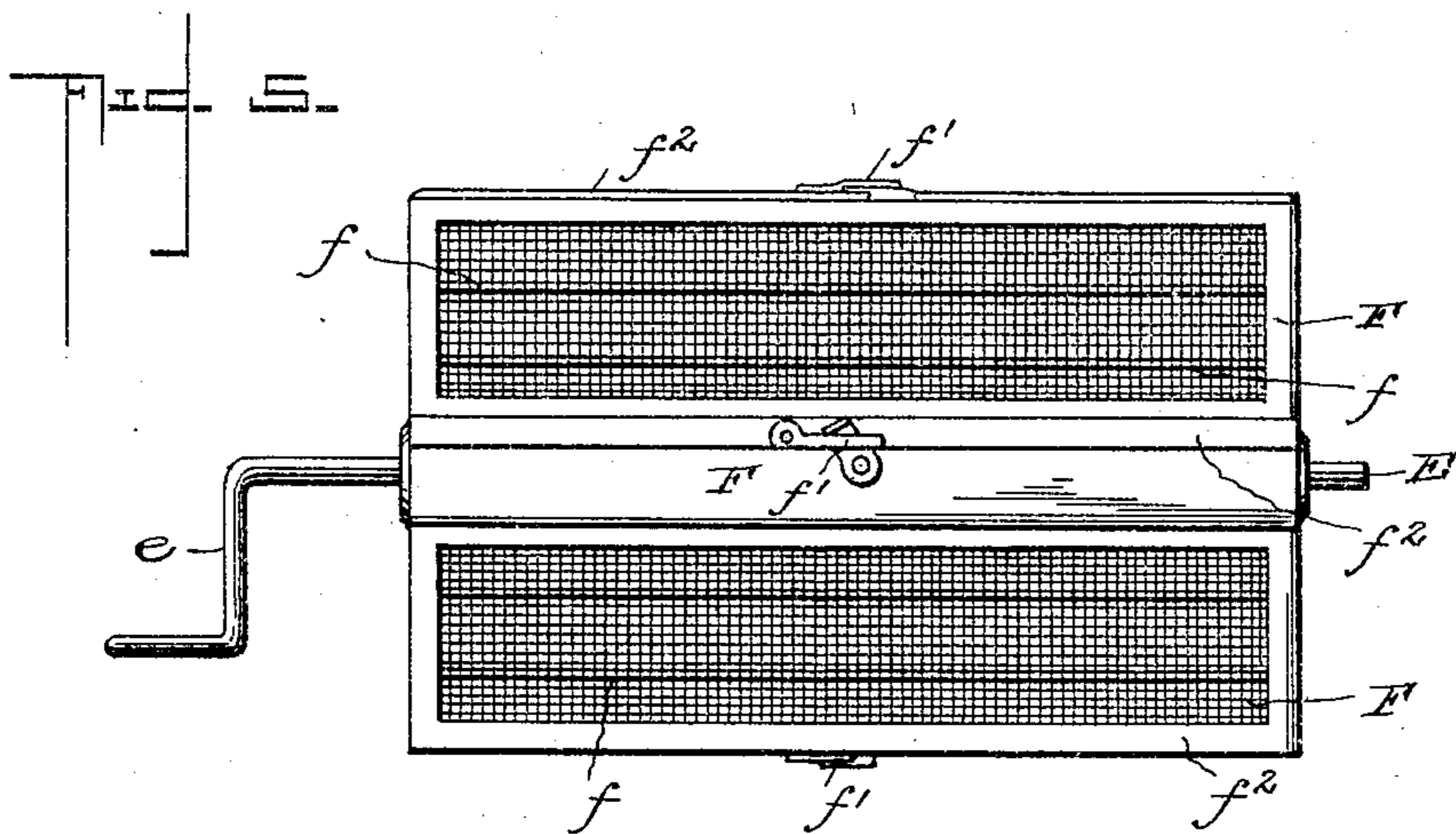
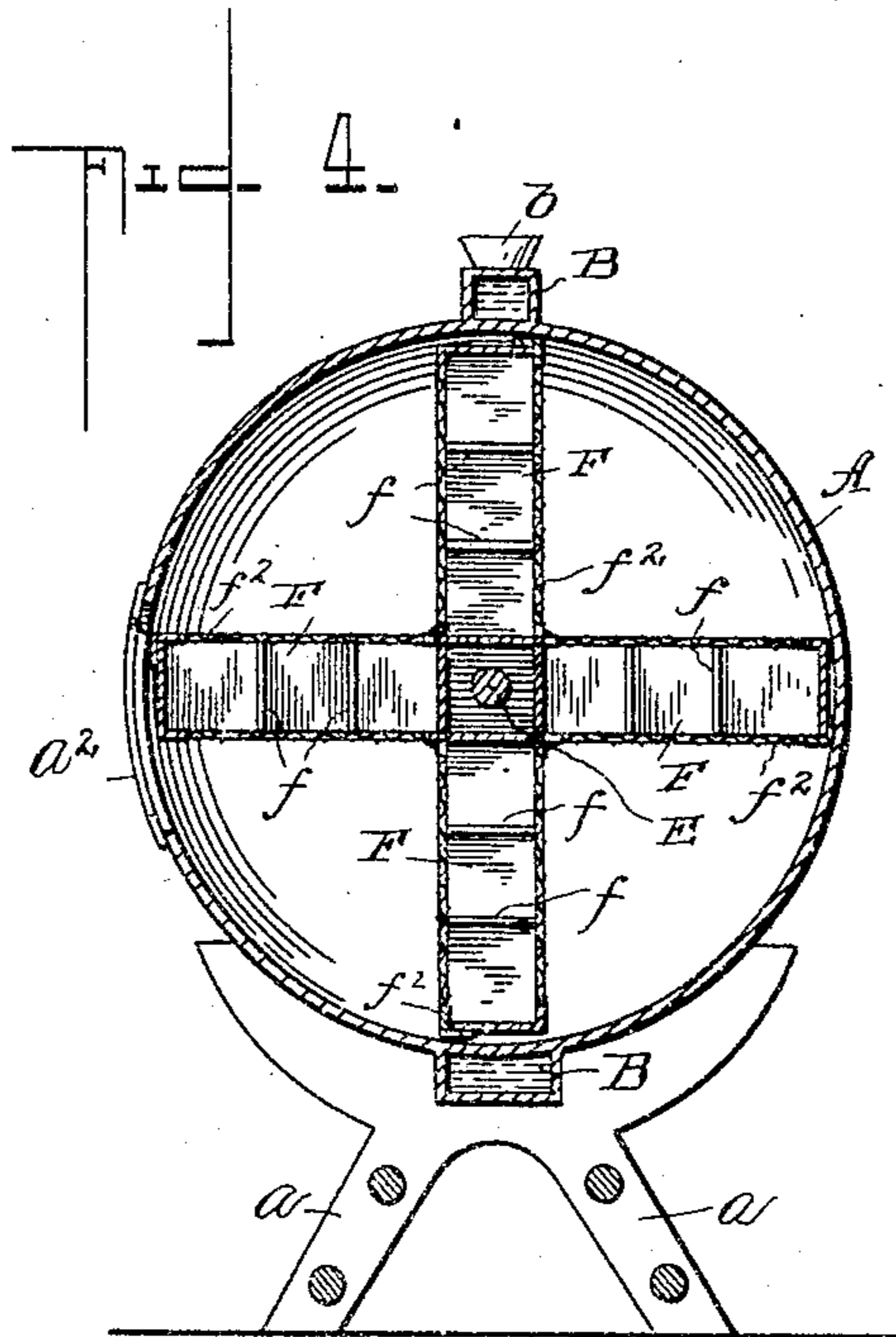
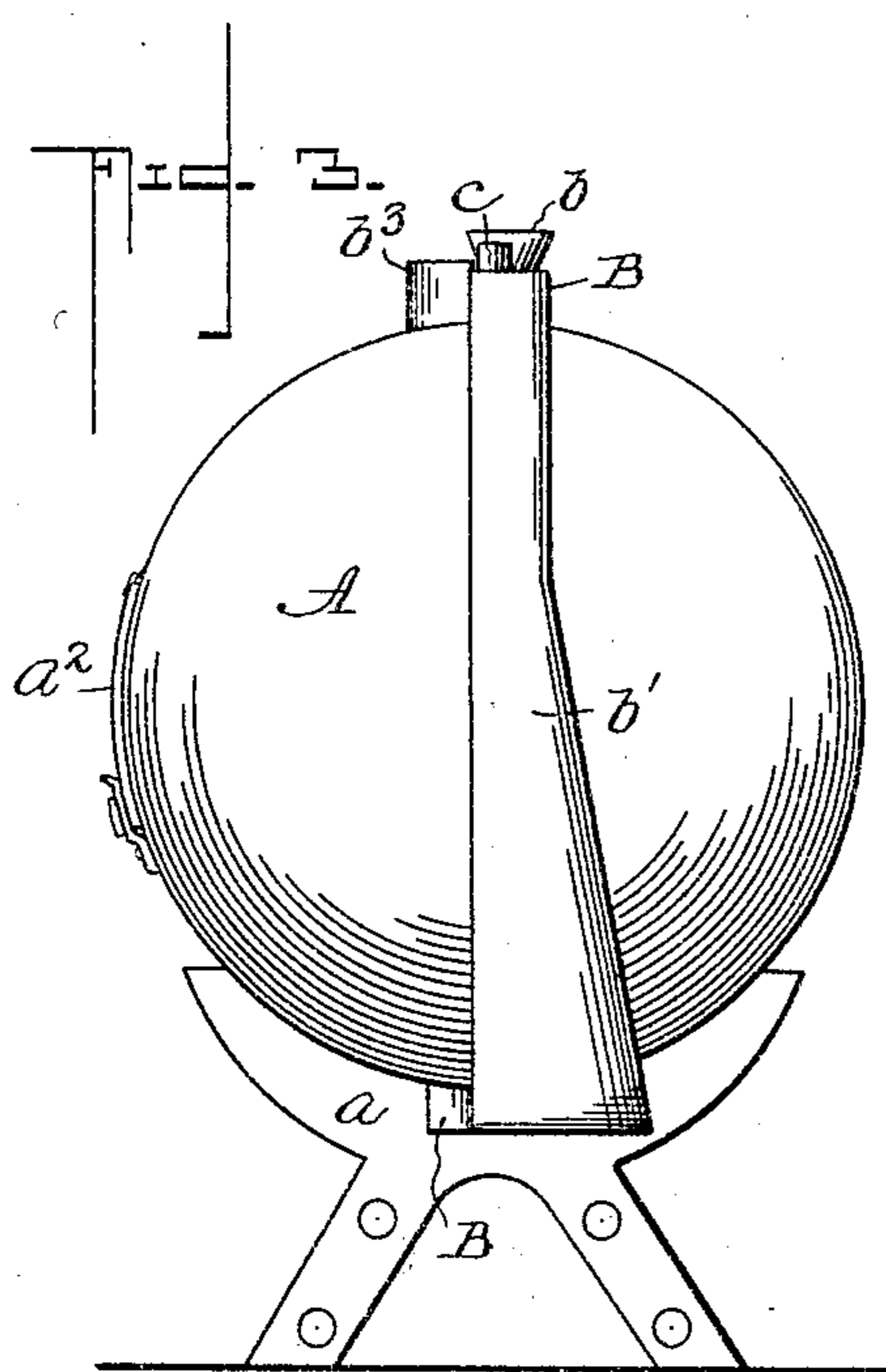
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2 SHEETS—SHEET 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEPH BURGER, OF WINFIELD, KANSAS.

INCUBATOR.

SPECIFICATION forming part of Letters Patent No. 771,707, dated October 4, 1904.

Application filed October 21, 1903. Serial No. 177,906. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH BURGER, a citizen of the United States, residing at Winfield, in the county of Cowley and State of Kansas, have invented an Incubator, of which the following is a full and complete specification.

This invention relates to incubators; and the objects of the invention are to provide an incubator which shall be simple and compact in construction, effective in use, and shall provide for quickly and conveniently turning the eggs when required.

These and other objects and advantages are attained by a peculiar construction of incubator wherein the trays which hold the eggs during incubation are radially supported from a horizontal shaft and the said revoluble sets of trays mounted in a cylindrical casing having a water-belt and heating device therefor, by which latter the eggs may be maintained at the proper temperature.

The following specification enters into a detail description of my invention, reference being had to the accompanying drawings, and what I claim as novel, and desire to protect by Letters Patent, is more specifically set forth in the appended claim.

In the drawings, Figure 1 is a side elevation showing my incubator arranged for use. Fig. 2 is a longitudinal vertical sectional view. Fig. 3 is an end view. Fig. 4 is a transverse vertical sectional view. Fig. 5 is a detail view of the trays.

Similar letters of reference indicate similar parts in all the views of the drawings.

In carrying out my invention I employ, in the first place, a cylindrical casing A, suitably supported upon legs *a* and composed, preferably, of a wooden body provided in front with an opening *a'*, having a hinged door *a''*. Around this casing, lengthwise of the same, is a water-pipe B, having a feed-opening *b*, and that part of this pipe which extends down one end of the cylinder or casing is enlarged, as at *b'*, to accommodate a vertical flue *c*, extending through the center of said enlarged portion and preferably funnel-shaped, as shown. At the lower end of this flue is placed a lamp, as D, which serves to heat the water in the pipe and by which heated water the

proper temperature of the eggs is maintained. An opening or vent *a'''* is located in the upper part of the casing, and in this opening may be placed a thermometer to ascertain the temperature of the air in said casing. It will be seen, therefore, that hot water is employed as the direct heating medium and that the pipe which contains the water extends lengthwise of the casing and around the same to heat all parts thereof evenly, also that the said water-pipe being continuous a circulation is kept up in the same.

In the casing hereinbefore described the eggs are arranged in a peculiar manner. Extending longitudinally through the center of the casing A and bearing in the ends thereof is a horizontal shaft E, to which are secured, so as to radiate therefrom, a series of trays F, the bottom, top, and inner end of which are preferably made of wire-netting, so that the air can circulate freely around the eggs which are placed therein. These trays are comparatively wide and are therefore provided with longitudinal partitions *f*, so that the egg-compartments so formed extend the full length of the tray and the eggs are placed therein lengthwise in a row. The top *f''* of each tray is hinged at its inner end and at its outer end is provided with a spring-catch *f'''*, by which it is held closed. By arranging the egg-trays in the casing upon a horizontal shaft, as herein shown and described, all the trays may be turned simultaneously, and by giving the shaft a half-turn all the eggs will be turned over. The shaft is extended beyond one end of the casing and provided with a crank-handle.

In filling the incubator the trays are successively brought to the opening *a'* and filled, and after all the trays are filled, or as many as desired, the door *a''* is closed, the water-pipe B is filled with water, and a lamp is then placed under the flue C. The hot water circulating around the casing will supply the heat to maintain the eggs at the proper temperature, and the eggs may be turned when desired by simply turning the crank *e*.

By locating the hot-water pipe around the casing and longitudinally thereof a more uniform temperature can be maintained with a

comparatively small flame to the lamp, and necessary ventilation is secured by opening the front door *a*². This door is preferably covered with glass, so that the condition of the
5 eggs can be viewed without opening said door, and as the chicks are hatched they are removed from the trays.

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

In an incubator, the combination, of a cylindrical casing, a hot-water pipe extending around the same longitudinally and centrally and provided with an enlarged portion or section
15 down one end of the casing, said enlarged portion of the pipe being wider at the lower end and tapered upward, a flue extending up-

ward through said enlargement of the pipe, and a lamp placed under said flue; together with a horizontal shaft mounted in the casing
20 and having a crank-handle at one end beyond said casing, and egg-trays attached to said shaft and projecting radially therefrom, said trays being made up of wire-netting and having a hinged top held closed by a spring-
25 catch; the casing being provided in front with a hinged door as herein shown and described.

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

JOSEPH BURGER.

Witnesses:

T. A. MORRISON,
F. R. HUTCHINSON.