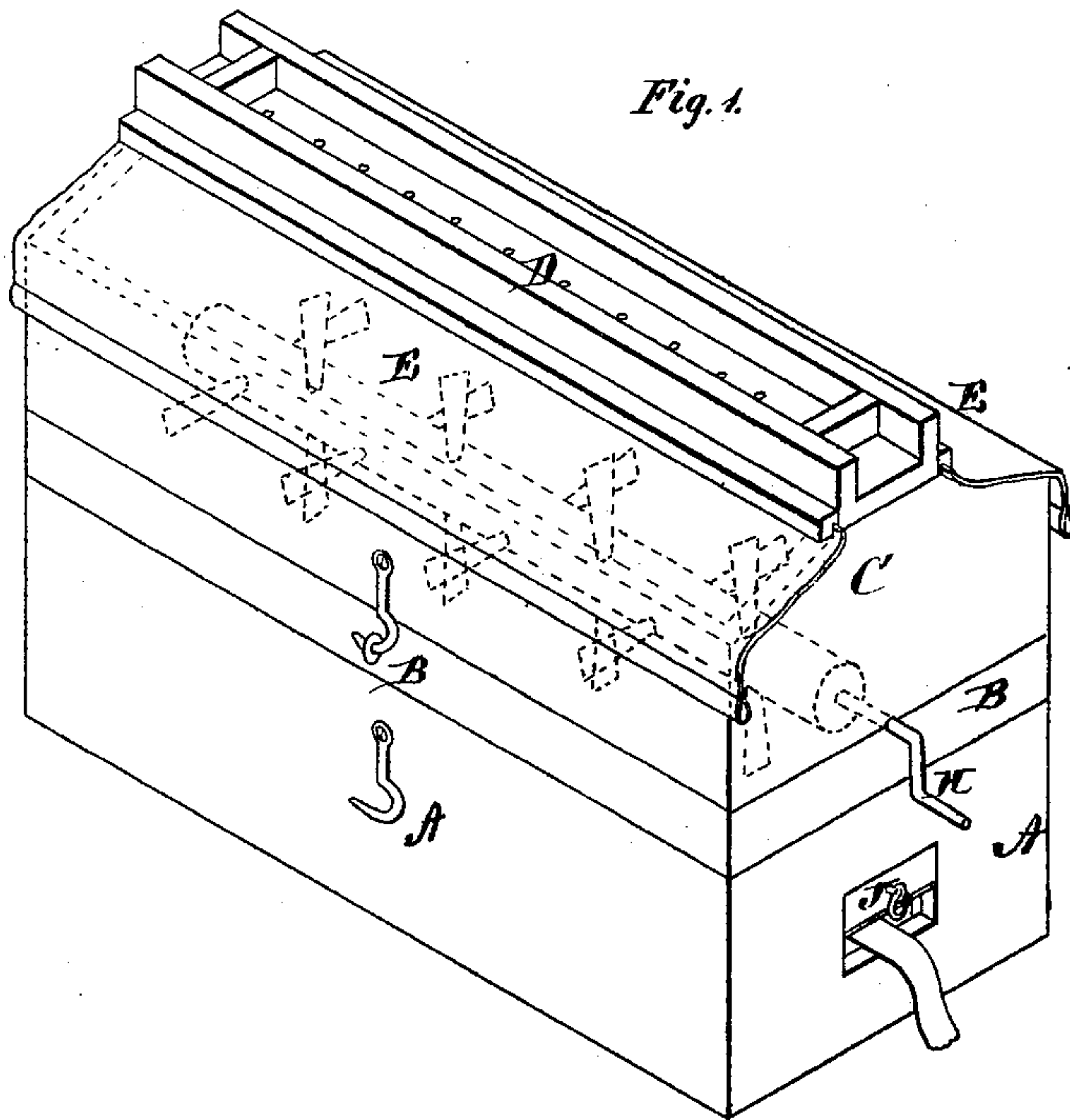


L. DIMICK.

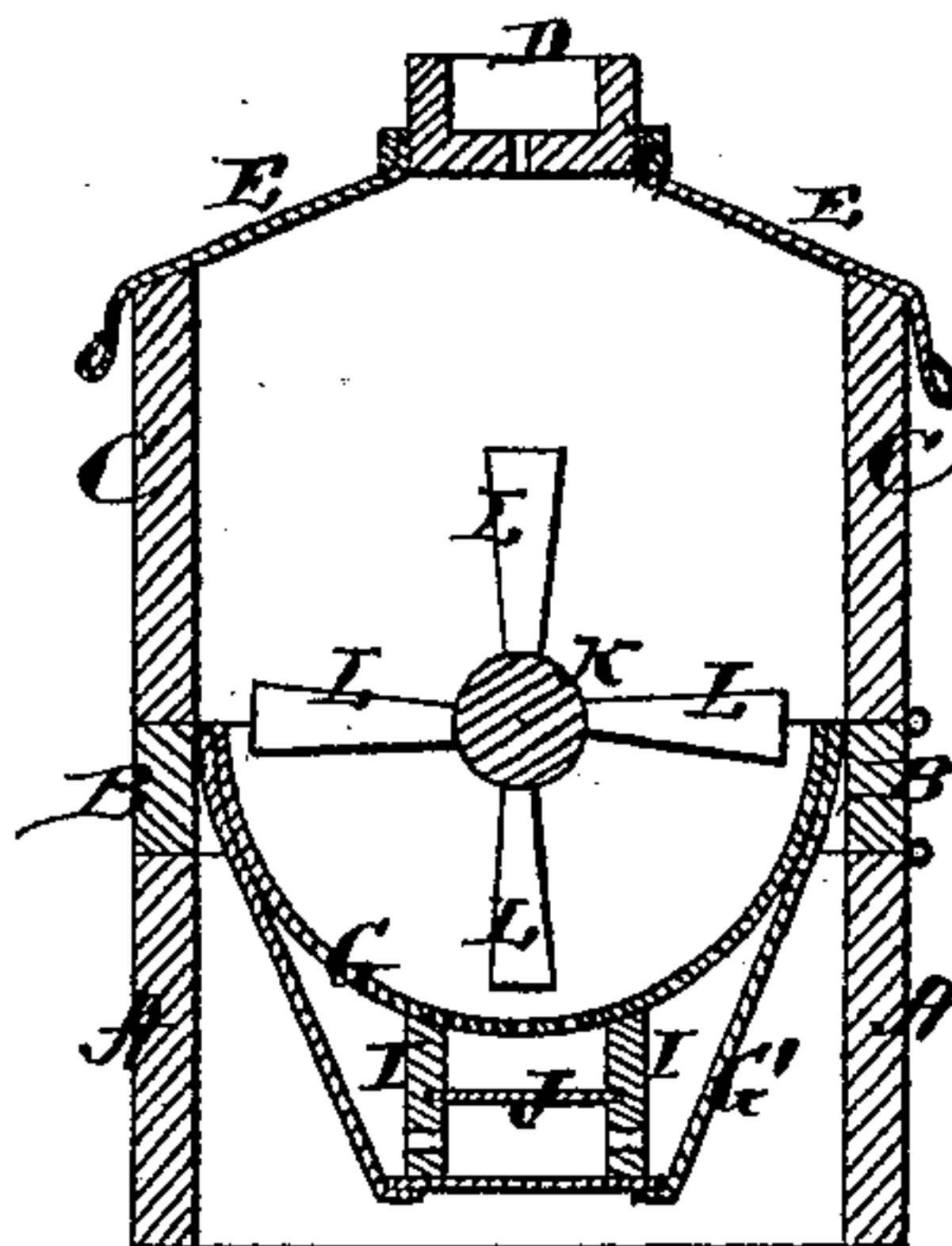
Improvement in Feather-Renovators.

No. 129,325.

Patented July 16, 1872.



*Fig. 2.*



Witnesses:

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C. L. Ewert.

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per *Hand Mason*

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Fig. 3.

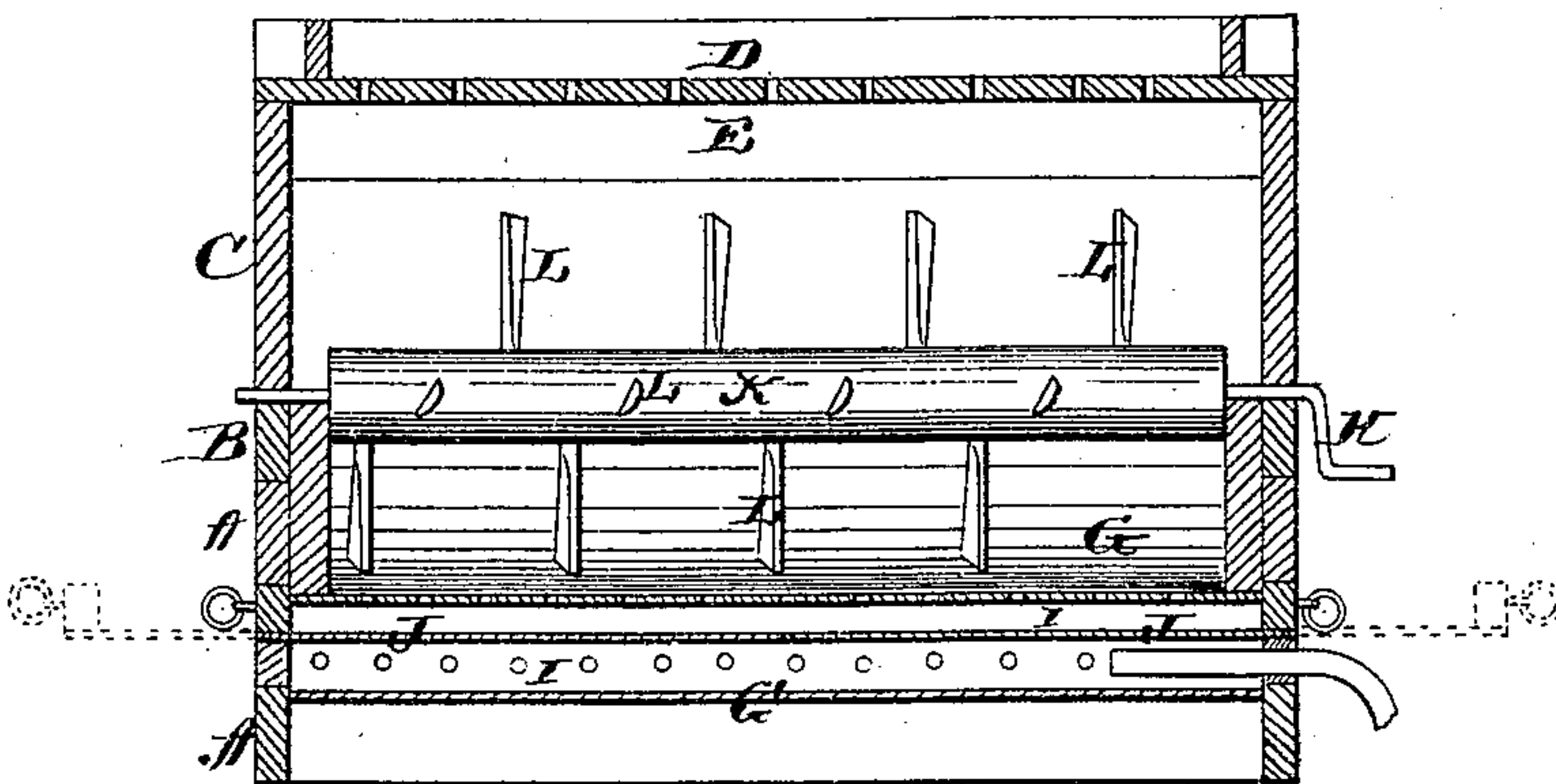
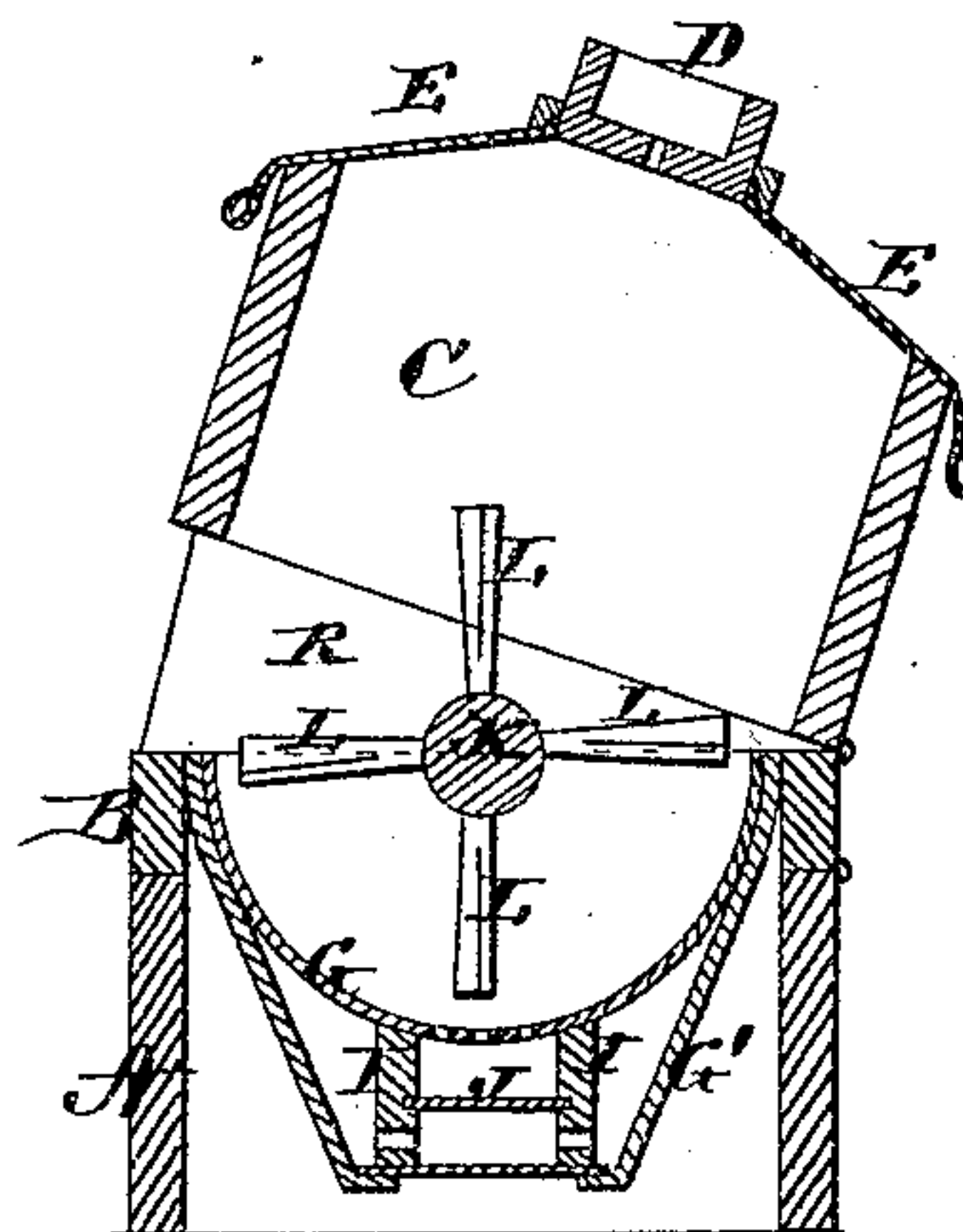


Fig. 4.



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# UNITED STATES PATENT OFFICE.

LYMAN DIMICK, OF ELLSWORTH, NEW YORK, ASSIGNOR TO HIMSELF,  
ABNER OWENS, AND WILLIAM H. OLMSTED, OF SAME PLACE.

## IMPROVEMENT IN FEATHER-RENOVATORS.

Specification forming part of Letters Patent No. 129,325, dated July 16, 1872.

*To all whom it may concern:*

Be it known that I, LYMAN DIMICK, of Ellsworth, in the county of St. Lawrence and in the State of New York, have invented certain new and useful Improvements in Feather-Renovator; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "feather-renovator," as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my machine. Fig. 2 is a transverse vertical section, and Fig. 3 a longitudinal vertical section, of the same. Fig. 4 is also a transverse vertical section of the machine, showing its position at a different stage of the process.

A represents the bottom frame of my machine, to which is hinged the middle frame B, and to this is hinged the top frame C. The end pieces of the top frame are beveled or inclined, as shown, and a box, D, connects their highest portions, the bottom of said box being perforated. From the sides of the box D curtains E E depend, which cover the top of the frame C. All the frames are made of the same length and width, so as to close upon each other. To the middle frame B are secured two pans, G and G', which form a chamber between them. The inner pan G is perforated in the center its entire length for a suitable width, and on each side of said perforations is a vertical partition, I, extending the entire length of the pans and connecting with the outer pan G'. In the end pieces of the bottom frame A are openings to correspond with the space between the partitions I I, and through said openings are inserted drawers J J, dividing said space horizontally, as shown in Figs. 2, 3, and 4. The lower parts

of the partitions I I are perforated with a number of holes. Lengthwise of the pan G is a shaft or roller, K, the journals of which rest on the middle frame B, and one of them is provided with a crank, H, for turning. This shaft or roller is provided with beveled arms or beaters L L.

The feathers are put into the pan G and the shaft is turned moderately to let the dirt fall onto the bottom, and as the feathers are turned over by the arms L L the dirt is brushed through the holes into the drawers J J below. During the process of taking the dirt out the feathers are warmed by letting hot air or steam pass through between the two pans G G'. The disinfectant is then mixed with cold water and placed in the perforated box D on top of the machine. The drawers J J are then drawn out and the steam is let up through the bottom, and when the feathers are made damp enough by the disinfectant and the steam the drawers are put in to shut the steam out from the feathers. After this they are dried by the hot air from steam and oiled with feathered fowl's oil, the shaft being turned moderately during the whole process. When the feathers are completely dry the top frame C is opened and a three-cornered piece, R, put in at each end, as shown in Fig. 4, and the shaft turned rapidly, which causes the arms L L to throw the feathers out into the room, the coarse dirt remaining in the bottom of the machine. The cover E being made of cloth absorbs the steam that arises from the feathers while drying.

In the process of renovating feathers it is very important to take out the fine dirt before the feathers are dampened; to use a disinfectant for the purpose of leaving them in a healthy condition; and to oil them, as they need nourishment.

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

1. The frame for a feather-renovator, consisting of the hinged frames A B C, perforated box D, and cloth covers E E, all constructed and arranged substantially as and for the purposes herein set forth.

2. The combination of the perforated pan G,

pan G', perforated partitions I I, and drawers J J, all substantially as and for the purposes herein set forth.

3. The combination of the frames A, B, and C, perforated box D, covers E E, pans G G', perforated partitions I I, drawers J J, shaft K, and beveled arms L L, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 18th day of April, 1872.

LYMAN DIMICK. [L. S.]

Witnesses:

MARTIN WELCH,

LUCRETIA C. WELCH.