

(No Model.)

W. W. SNYDER.
Feather Renovator.

No. 235,710.

Patented Dec. 21, 1880.

Fig. 1.

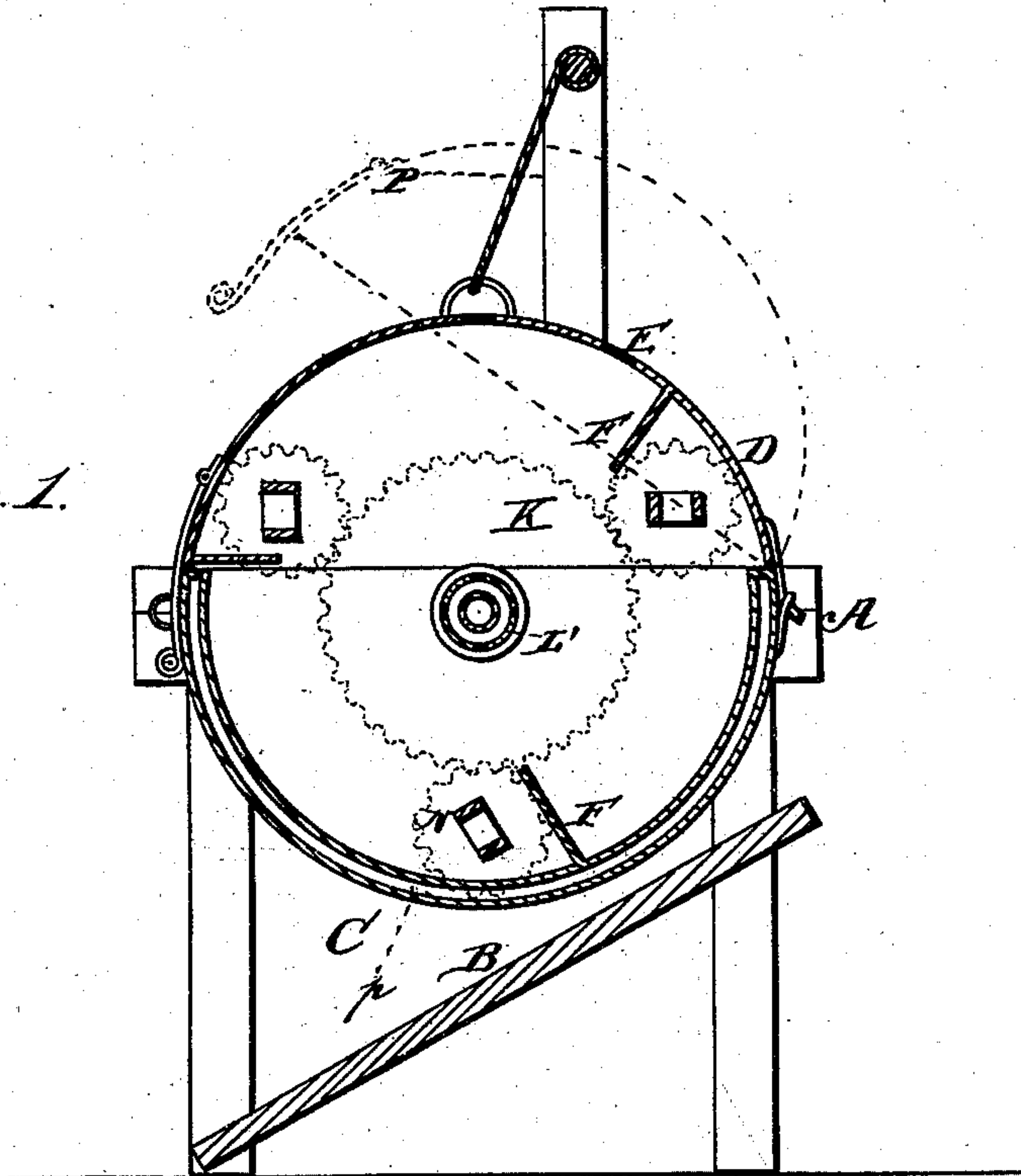
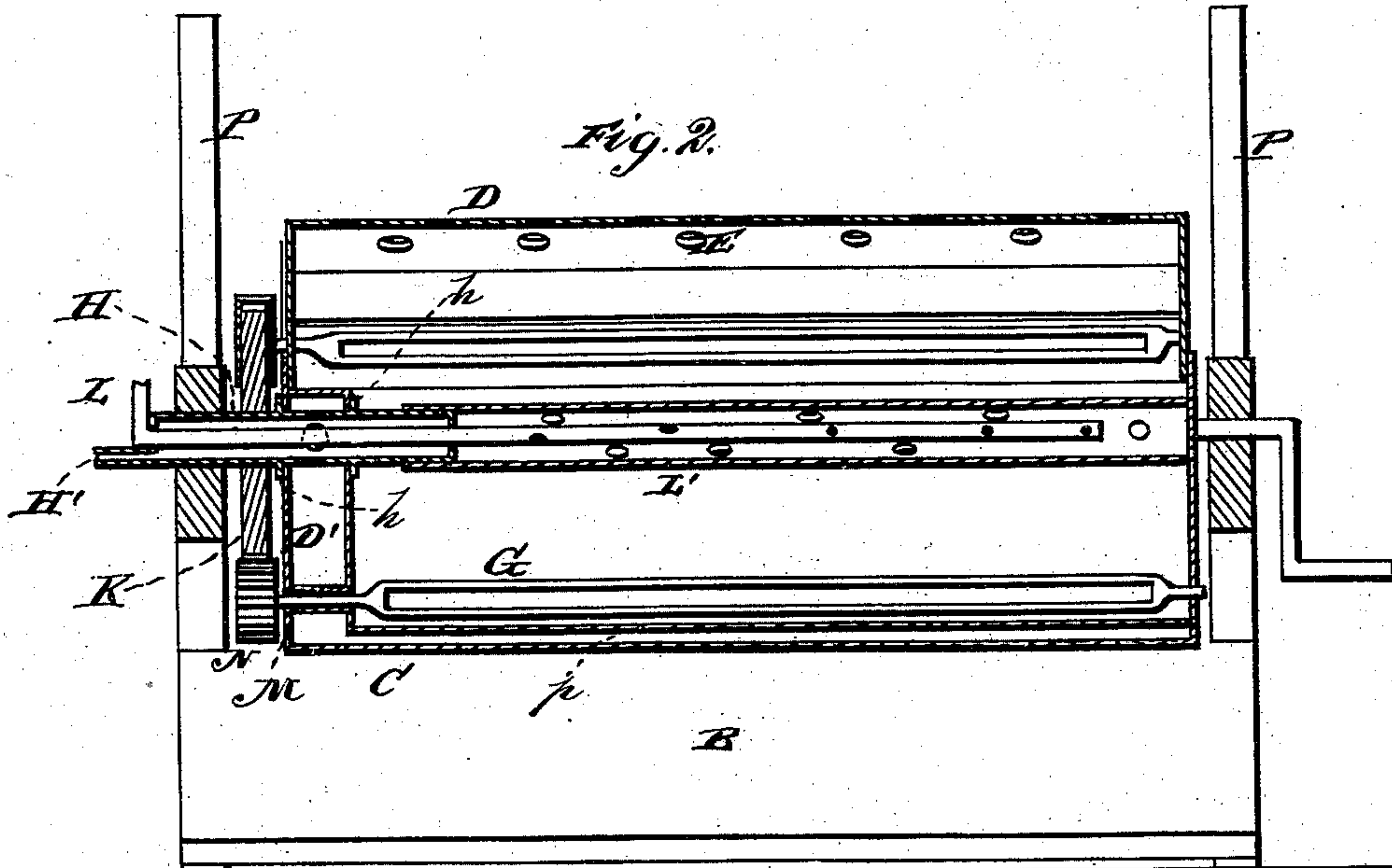


Fig. 2.



WITNESSES

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WARREN W. SNYDER, OF MARTINSVILLE, OHIO.

FEATHER-RENOVATOR.

SPECIFICATION forming part of Letters Patent No. 235,710, dated December 21, 1880.

Application filed March 6, 1880. (No model.)

To all whom it may concern:

Be it known that I, WARREN WALKER SNYDER, of the village of Martinsville, in the county of Clinton and State of Ohio, have invented certain new and useful Improvements in Feather Renovating, Cleaning, and Restoring; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a transverse section of my feather-renovator, and Fig. 2 is a longitudinal sectional view of the same.

The nature of my present invention relates to machines for renovating feathers; and my improvement consists in the construction and arrangement of parts, as fully set forth in the following description, and particularly pointed out in the claims.

A designates a frame, which is provided with an inclined platform, B, to receive the feathers after they have been let out of the renovating-cylinder.

The cylinder is made in two parts, C D, the latter of which is formed with perforations E for the exit of air and steam. Both halves of the cylinder have longitudinal partition-strips F, adjacent to which are the agitators G. The cylinder-section C is formed with a compartment, D', at one of its ends. This compartment communicates with a pipe, H, which passes through a cog-wheel, K, and the main frame.

L is a small perforated pipe, which passes from the exterior of the cylinder through pipe H and into the larger perforated pipe L', and is only perforated throughout that portion which is within the perforated pipe L'. This pipe L conducts steam to the pipe L', from which it passes to the interior of the cylinder.

The cog-wheel K is stationary upon the pipe H. The pipe H is provided with collars h h, and forms one of the bearings for the cylinder, and upon journals M of the agitators are small gears N, which engage with the cog-

wheel K, so that while the cylinder is rotated the agitators will also be actuated.

P P designate posts, in the upper ends of which a windlass will be journaled. A suitable crank will be employed for operating the windlass, the use of which will be to raise the section D of the cylinder in order to place feathers within the same or to remove them.

The section C is double-walled, the space p between the two walls being in communication with the end compartment, D'.

In this machine I propose employing in some cases a funnel to pour some disinfecting-liquid into pipe L, so that it will enter the cylinder and disinfect the feathers. As the cylinder is rotated the feathers will be shaken and stirred around by the agitators, and the steam, entering pipe L, will pass into pipe L', and thence into the cylinder, so as to cleanse and purify the feathers.

To dry the feathers steam is shut off from pipe L and admitted into the short pipe H through a tube, H'. Thence it passes through apertures in pipe H into the compartment D' and the space p between the two walls of the cylinder-section C, thereby effectually drying the feathers.

What I claim, and desire to secure by Letters Patent, is—

1. In a feather-renovator, the cylinder C D E, constructed to rotate upon the pipe H at one end and upon a suitable shaft at the other, in combination with the pipes H, L, and L', the rotary agitators G, having gear-wheels N, and the stationary cog-wheel K upon the pipe H, substantially as and for the purposes set forth.

2. In a feather-renovator, the combination, with the rotary agitators constructed as described, of the partition-strips F upon the interior of the cylinder, substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WARREN W. SYNDER.

Witnesses:

J. D. OURLEY,
E. A. REED.