

(No Model.)

G. LUTZ.
FEATHER RENOVATOR.

No. 245,525.

Patented Aug. 9, 1881.

Fig. 1.

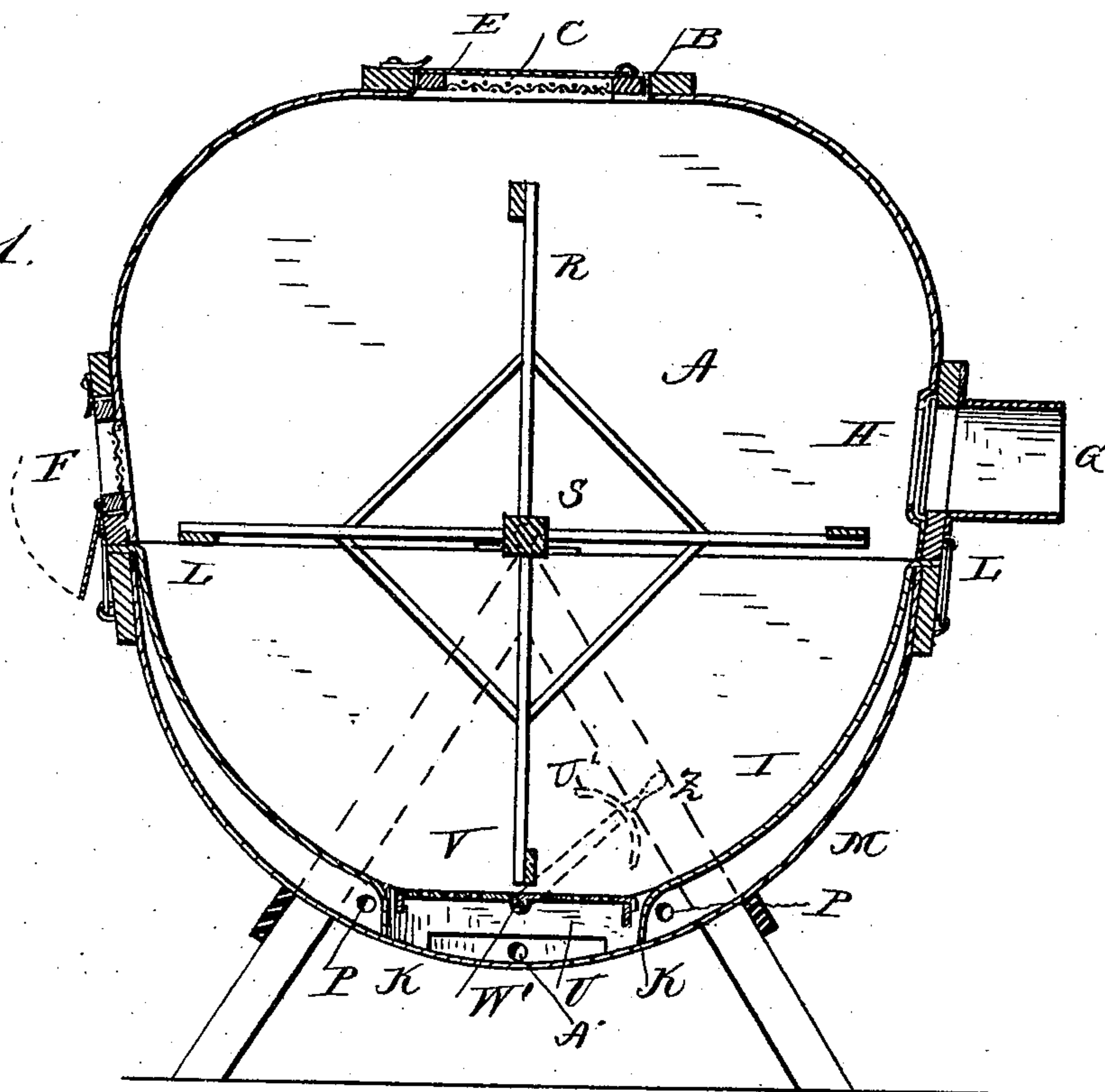
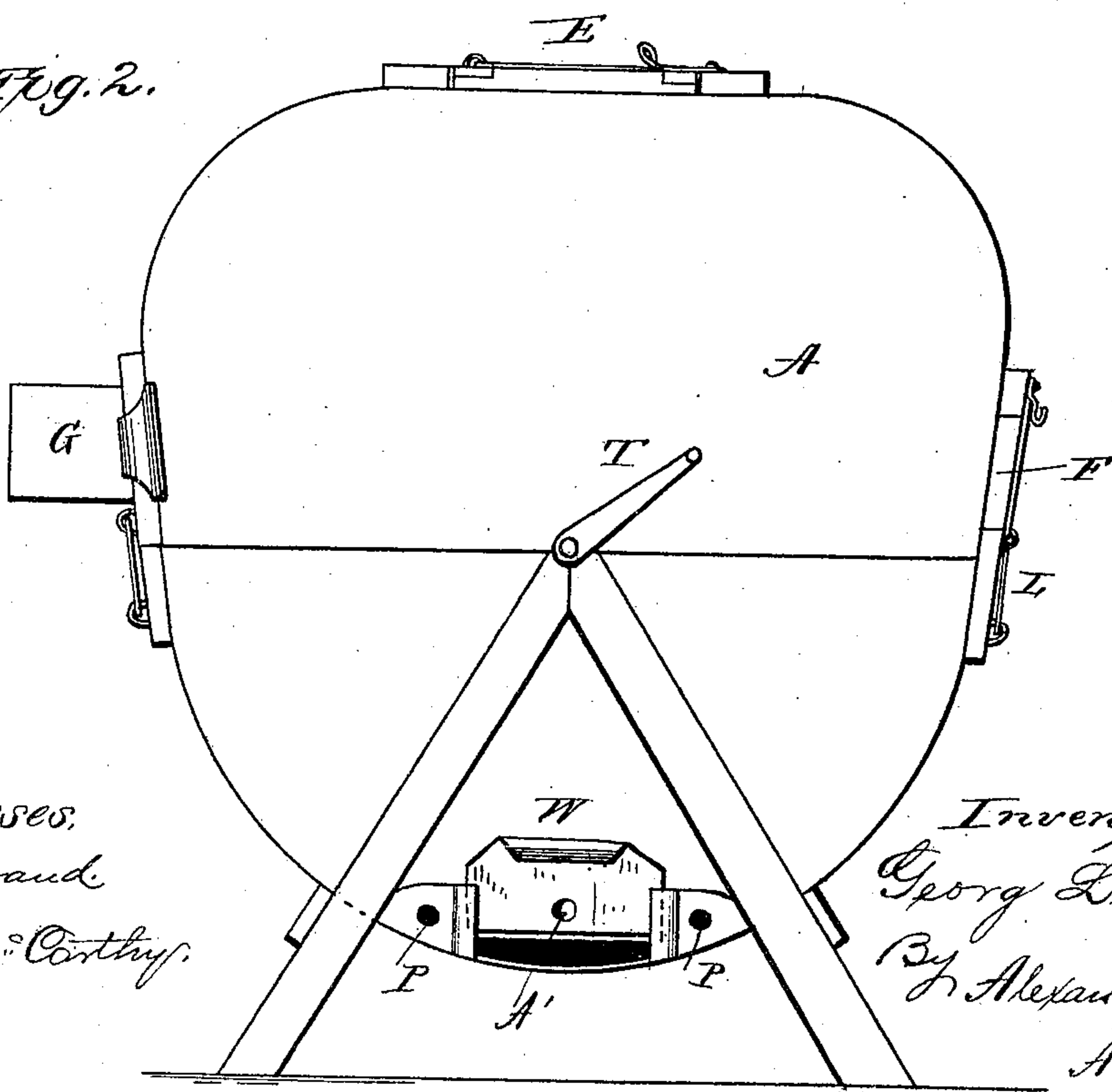


Fig. 2.



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GEORG LUTZ, OF LEAVENWORTH, KANSAS.

FEATHER-RENOVATOR.

SPECIFICATION forming part of Letters Patent No. 245,525, dated August 9, 1881.

Application filed May 26, 1881. (No model.)

To all whom it may concern:

Be it known that I, GEORG LUTZ, of Leavenworth city, in the county of Leavenworth, and in the State of Kansas, have invented certain
5 new and useful Improvements in Feather-Renovators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked
10 thereon, making a part of this specification.

This invention relates to certain improvements in feather-renovators; and it has for its objects to provide an improved apparatus whereby soiled feathers may be effectually and
15 automatically cleansed, as more fully herein-after set forth. These objects I attain by the apparatus illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical sectional view
20 of my entire apparatus, and Fig. 2 an elevation of the same.

The letter A indicates a wooden casing, which is approximately in the form of a cylinder, and constructed in two parts, which are adapted to
25 fit together in such manner as to form a closed receptacle for the feathers.

The upper part of the shell is provided with an opening, B, which has fitted in it a removable foraminous screen, C, to the frame of which
30 is hinged a door, E, by means of which the opening may be securely closed.

At one side of the upper part of the shell is an opening, F, which is provided with a foraminous screen and door similar to those before mentioned, and at the opposite side of said
35 shell is an air-duct, G, which is provided with a slide, H, by means of which the current of air may be admitted or cut off at will.

In the lower half of the casing is an interior
40 shell, I, of sheet metal. This is attached at the points K and L to the outer shell, leaving a space, M, between the shells for the introduction of steam, which is supplied through the openings P.

The letter R indicates a rotary agitator mounted on a shaft, S, which is journaled in bearings in opposite sides of the lower half of the shell. The said shaft is provided with a winch, T, by means of which the agitator may
50 be rotated. At the bottom of the lower portion of the shell is a transverse recess, U, which

is provided with a door, W, at one end. The said recess is for the collection and removal of heavy particles which will not be discharged through the opening F.

The letter V represents a divided foraminous screen, one of the leaves of which is hinged to a transverse shaft, W', in such manner that it may be elevated by means of a suitable lever, Z, (indicated in dotted lines in the drawings,) in order to permit dirt and heavy impurities to fall into the recess U, the said lever being held in any desired position by means of the segment U'.

The letter A' indicates an aperture leading into the recess U, through which steam may be admitted by means of a suitable pipe.

The operation of my invention is as follows: The feathers are placed in the casing and subjected to the direct action of steam, which is supplied from the recess at the bottom through the foraminous screen, being thoroughly beaten and stirred by the rotating agitator. When thoroughly cleansed the steam is shut off from the interior and is turned into the space between the shells, so as to dry the feathers, the direction of the agitator being reversed and one of the screens elevated, so as to throw the feathers against said screen while drying and effectually separate all heavy impurities.

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

1. In combination with the inner and outer shells provided with a recess at the bottom, the hinged foraminous screen and its lever, adapted to be operated substantially as and for the purposes specified.

2. In combination with the inner and outer shells provided with openings and screens, as set forth, the recess at the bottom and the hinged screens and operating-lever of the rotating agitator, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of February, 1881.

GEORG LUTZ.

Witnesses:

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