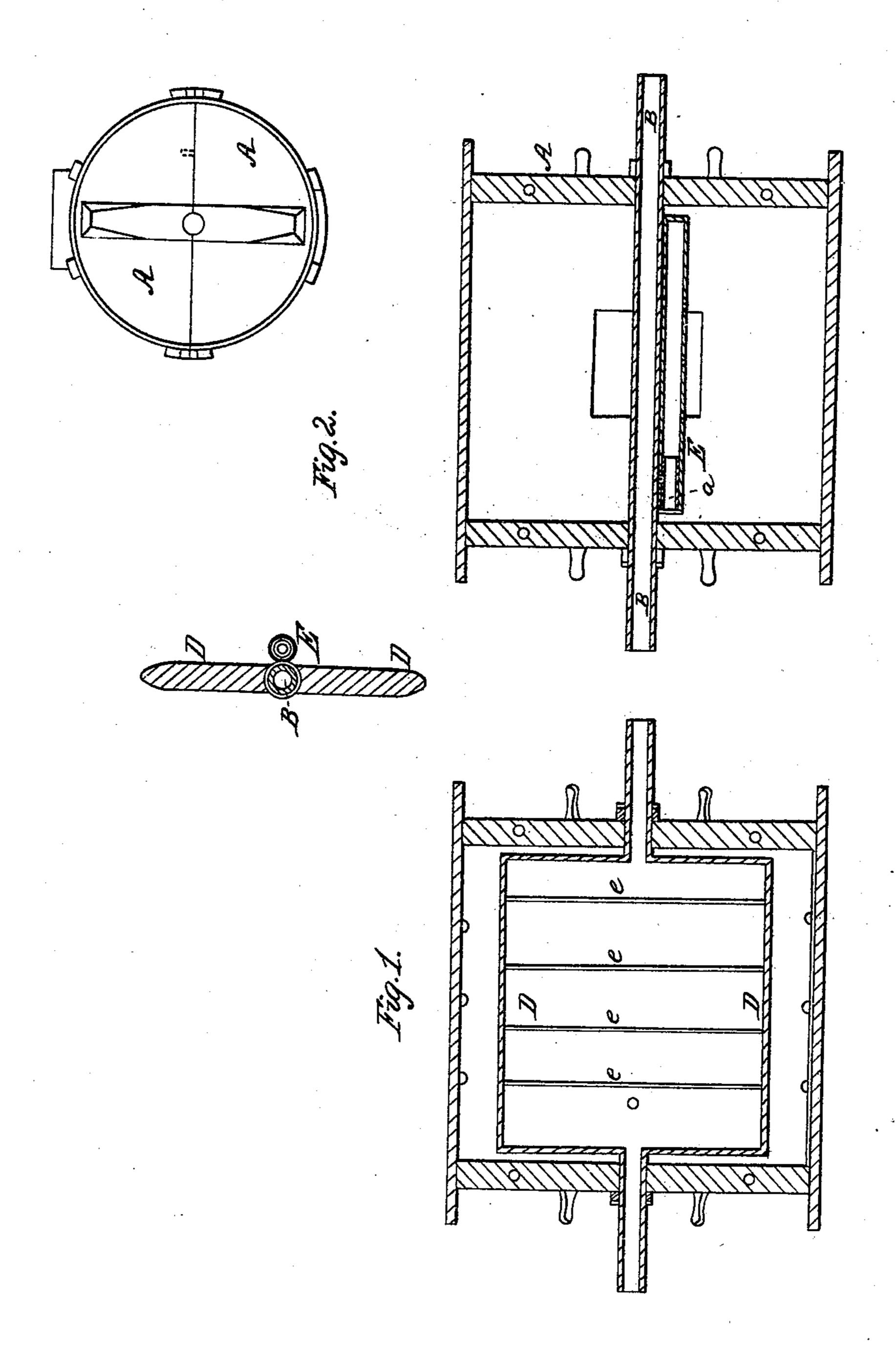
J. R. MORRISON.

Feather Dresser.

No. 33,489.

Patented Oct. 15, 1861.



Tillita acces.

Witnesses: Witnesses:

Inventor: - Robertson

N. PETERS, Photo-Lithographer, Washington, D. C.

United States Patent Office.

JOHN R. MORRISON, OF EAST SPRINGFIELD, OHIO.

IMPROVEMENT IN APPARATUS FOR CLEANING AND RENOVATING FEATHERS.

Specification forming part of Letters Patent No. 33,489, dated October 15, 1861.

To all whom it may concern:

Be it known that I, JOHN R. MORRISON, of East Springfield, Jefferson county, Ohio, have invented certain new and useful Improvements in Machines for Cleaning and Renovating Feathers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the let-

ters of reference marked thereon.

In the annexed drawings, making part of this specification, A represents a cylindrical case made of wood or metal and provided with suitable doors for ventilation. The case is divided in two parts, as is shown, so that it can be readily taken apart. This case may be either constructed in this manner or it may be formed by covering a skeleton frame with canvas, in which case doors would not be so necessary for ventilation, as air could pass through the canvas freely.

B represents a hollow shatt which passes through the case and which has its bearings or journal-boxes in the sides of the case. Secured to this shaft are hollow wings D D. I use two of these wings in this case; but more

may be used, if necessary.

E represents a perforated tube, which is secured longitudinally of the shaft and which connects with the hollow of the shaft. This tube may be made nearly flat, so as not to catch dust or dirt or feathers. The opening between the tube and the hollow shaft is near one end, and is regulated by means of a plug or faucet a. This plug a has an opening in it similar to the common faucet, so that when it is turned in one position a connection will be formed between the tube and shaft, and when changed to a different position this connection will be cut off.

When feathers are placed in the case A, the shaft B is set in motion and steam is passed through said shaft. This steam enters the wings D D and heats them. It also enters the perforated tube E when the plug is so turned as to allow it and jets out among the feathers through the perforations in said tube. After a sufficient quantity of steam has been thrown into the case to prepare the feathers, an instrument is inserted through an open-

ing in the case and the plug or faucet is turned so as to cut off the steam from the perforated pipe. The steam now passes through the shaft and through the hollow wings and serves to heat the wings in order to dry the feathers. The shaft all the while is revolving, and the feathers are being constantly beat up, allowing air to mingle with them while they are being warmed by the hot steam in the wings and pipe.

The shaft, with the wings and perforated tube, may be removed from the case and inserted in an ordinary bed-tick, and the feathers thus cleansed and renovated without being removed from the tick. In such a case a frame would be necessary upon which to place the tick, in order to hold it in proper position to have the feathers operated on by the wings.

The case A is secured upon a proper frame, and is so arranged that it may be revolved when desirable. There are two doors in the case, and when I desire to remove the feathers from it I secure the mouth of the tick at one door and use a blast of air at the other. There being a ventilator in the tick, I have no difficulty in thus forcing the feathers from the case into the tick with the current of air.

It will be seen that the wings D D are braced by rods e e e, which run crosswise of the shaft B, so that their shape will not be destroyed or changed by the pressure of steam when the steam is confined in the shaft and wings.

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

1. The employment of the wings D D upon the shaft B, when constructed and used as and for the purpose specified.

2. The arrangement of the shaft B, the wings D D, and the perforated pipe E, as and for the purpose specified.

3. The combination of the shaft, the wings, and the perforated pipe with the divided case, constructed as and for the purpose set forth.

JOHN R. MORRISON.

Witnesses;

C. M. ALEXANDER, T. H. ALEXANDER.