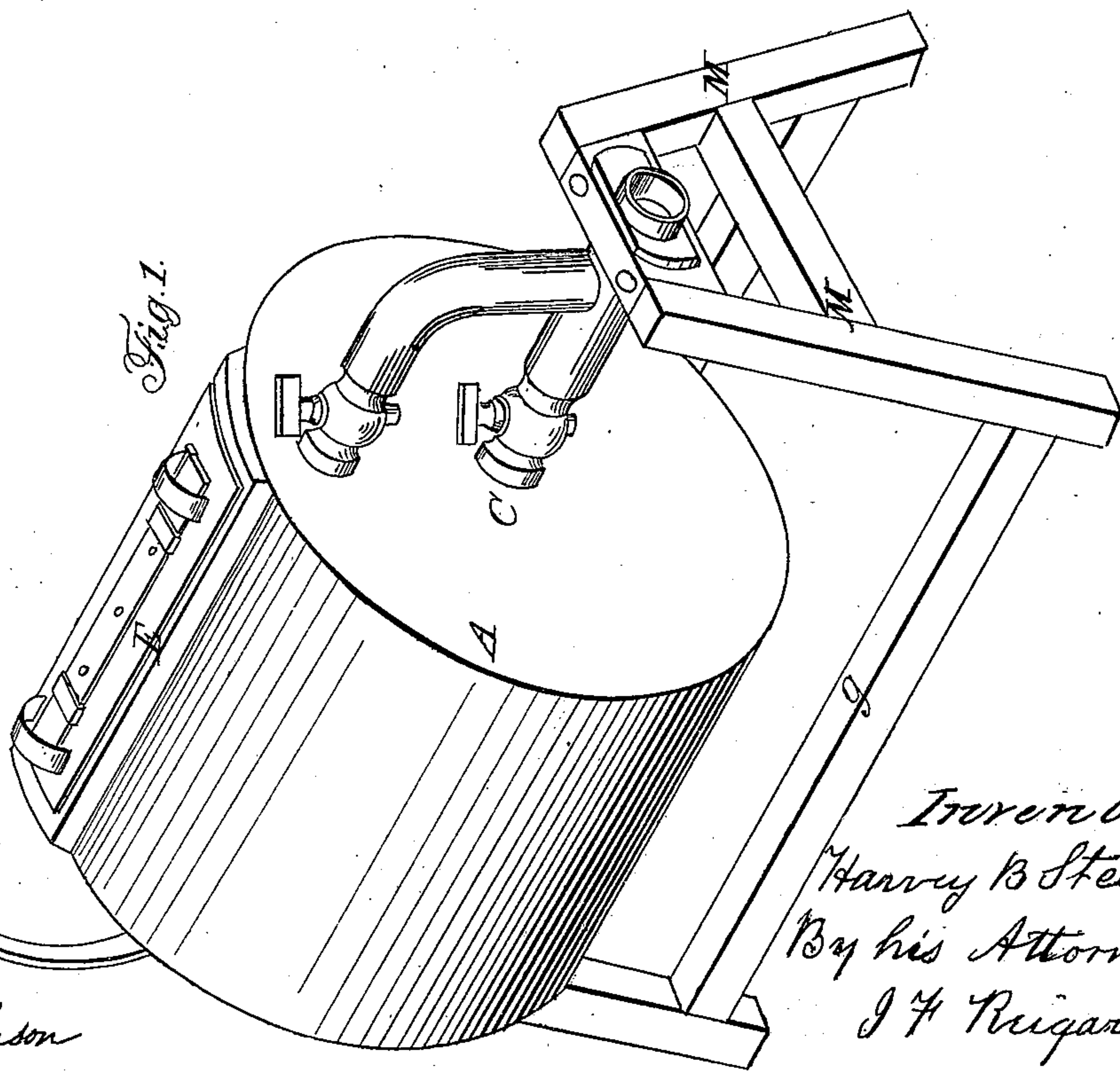
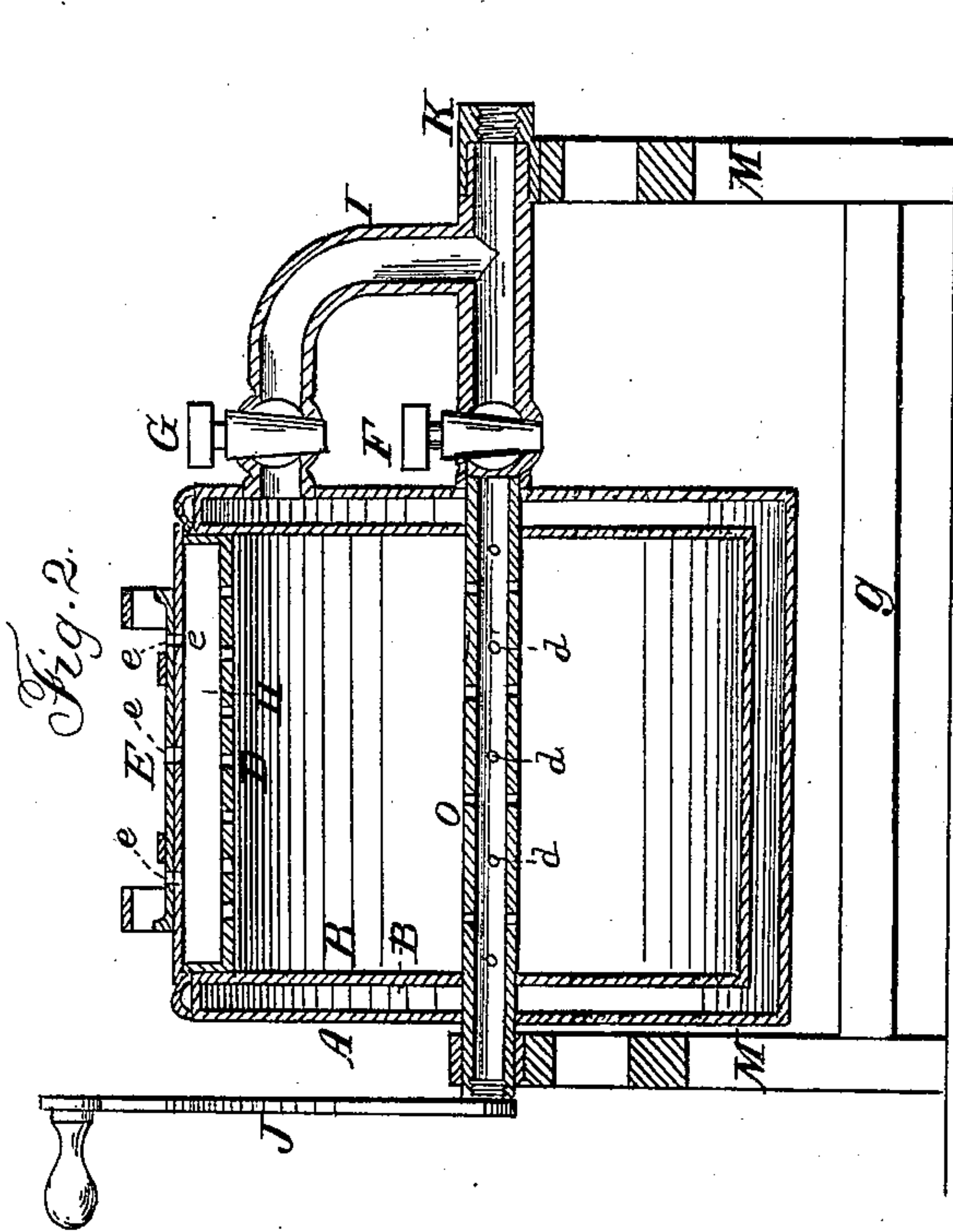


H. B. STEELE.
Feather Renovator.

No 76,840.

Patented April 14, 1868.



Witnesses
Ed Mayhew
Geo H Anderson

Inventor
Harry B Steele
By his Attorney
J F Reigart

United States Patent Office.

HARVEY B. STEELE, OF WEST WINSTED, CONNECTICUT.

Letters Patent No. 76,840, dated April 14, 1868.

IMPROVED MACHINE FOR CLEANSING AND RENOVATING FEATHERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HARVEY B. STEELE, of West Winsted, county of Litchfield, and State of Connecticut, have invented a new and improved Machine for Cleansing, Renovating, and Disinfecting Feathers, Bed-Clothing, Wearing-Apparel, or other articles which may have been exposed to any infectious disease; and I hereby declare that the following is a full description thereof, references being had to the accompanying drawing, and letters of reference marked thereon.

The nature of my invention and improvement consists in the construction of two cylinders, of tin, zinc, sheet iron, or any suitable material, one within the other, with small space between the two, for the introduction of steam, for drying the disinfected article after the process of fumigation, the double cylinder having an aperture, for the purpose of putting in the feathers, and a steam-tight slide, to cover and close the aperture. The cylinders revolve upon a hollow axle, that is perforated so as to admit steam of a disinfecting-compound in jets upon the feathers, the hollow axle having a regulating stop-cock, and supported by a suitable framework. Connected with the hollow axle is an additional steam-pipe, with a regulating stop-cock, to supply the chamber that occupies the entire space between the inside and outside cylinders, with steam, to dry and renovate the feathers after they have been disinfected.

Figure 1 represents a perspective view of the machine.

Figure 2, a sectional view of the same.

To enable others to fully understand my invention, I will proceed to describe the construction and operation of my machine, as follows:

A is the outer cylinder, and B the inner, both secured to shaft C. Shaft C, the length of it inside of cylinder B, is perforated with small openings, *a*, through which the disinfecting-fluid or vapor is discharged upon the feathers. Through both cylinders, as is shown in fig. 2, is an opening, H, through which the feathers, &c., are introduced into cylinder B.

Through pipe K and stop-cock F, from a vessel of any proper size and material, into which I place a disinfecting-compound, of my own compounding, or any other well-known disinfecting-material, which I dissolve in water or steam, I introduce into cylinder B, through its perforated shaft C and pipes K, &c., the vapor or steam arising from it, keeping the cylinder in constant motion, until the infection and bad odor and discoloration are entirely eradicated; after which the stop-cock F is closed, and the slide E on the cover, which covers the openings *e e*, is opened, and the foul effluvium, or affected air, is allowed to escape through the openings D and *e e* in the cover. Stop-cock F being closed, I open stop-cock G in pipe L, which is connected with a vessel, from which I introduce steam into the space P that entirely surrounds the inner cylinder, between the cylinders A and B, and, by the aid of the heat, I dry the feathers thoroughly.

The frame M, supports the shaft C, on which the cylinders revolve, (to facilitate the operation and the removal of the feathers, &c., from the cylinder B, after being renovated,) and the lower bar *g* is made adjustable, and is easily removed.

The connecting-pipe K is furnished with a packed revolving joint, by which the steam is admitted in the cylinders, with the necessary connection and separating-pipe.

The operation of my machine has been found very effective, from experiment, in restoring feathers and any other infected articles, and entirely removes all unpleasant odor or infection, and leaves the feathers quite equal in appearance to new ones.

Having described my invention, what I claim as my invention and improvement, and wish to secure by Letters Patent, is—

1. I claim the arrangement of the chamber P, surrounding the inner cylinder, and the cover H and slide E, constructed as described, and for the purposes set forth.

2. I also claim the arrangement of the fumigating-shaft C, in combination with the entire double cylinders A and B, so constructed and regulated by stop-cocks, that the feathers are first disinfected, and afterwards steam-dried, as herein set forth.

HARVEY B. STEELE.

Witnesses:

E. S. WOODFORD,

JAY E. SPAULDING.