

U. B. WADDLE.  
Feather Renovator.

No. 71,555.

Patented Nov. 26, 1867.

Fig. 1.

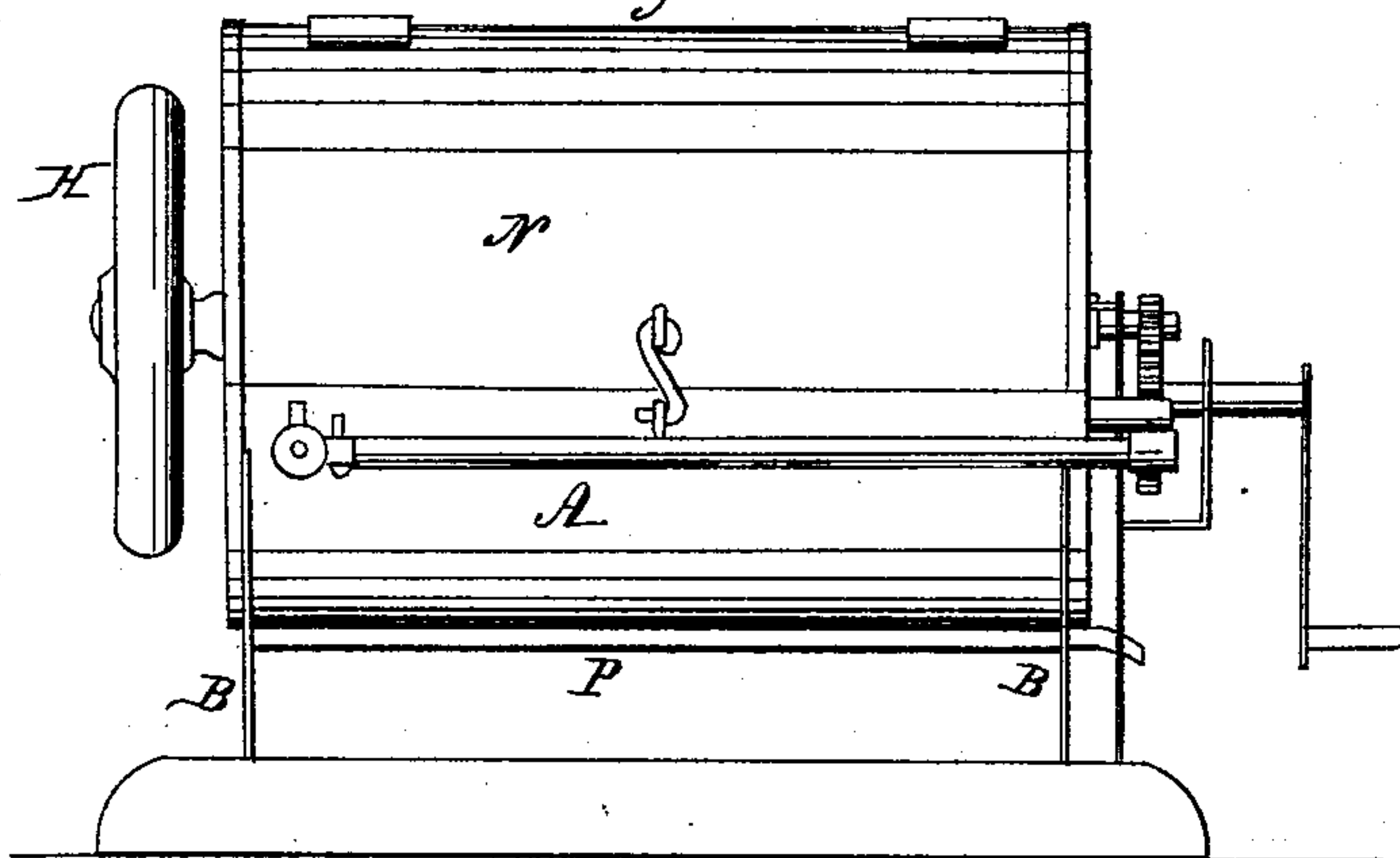


Fig. 2.

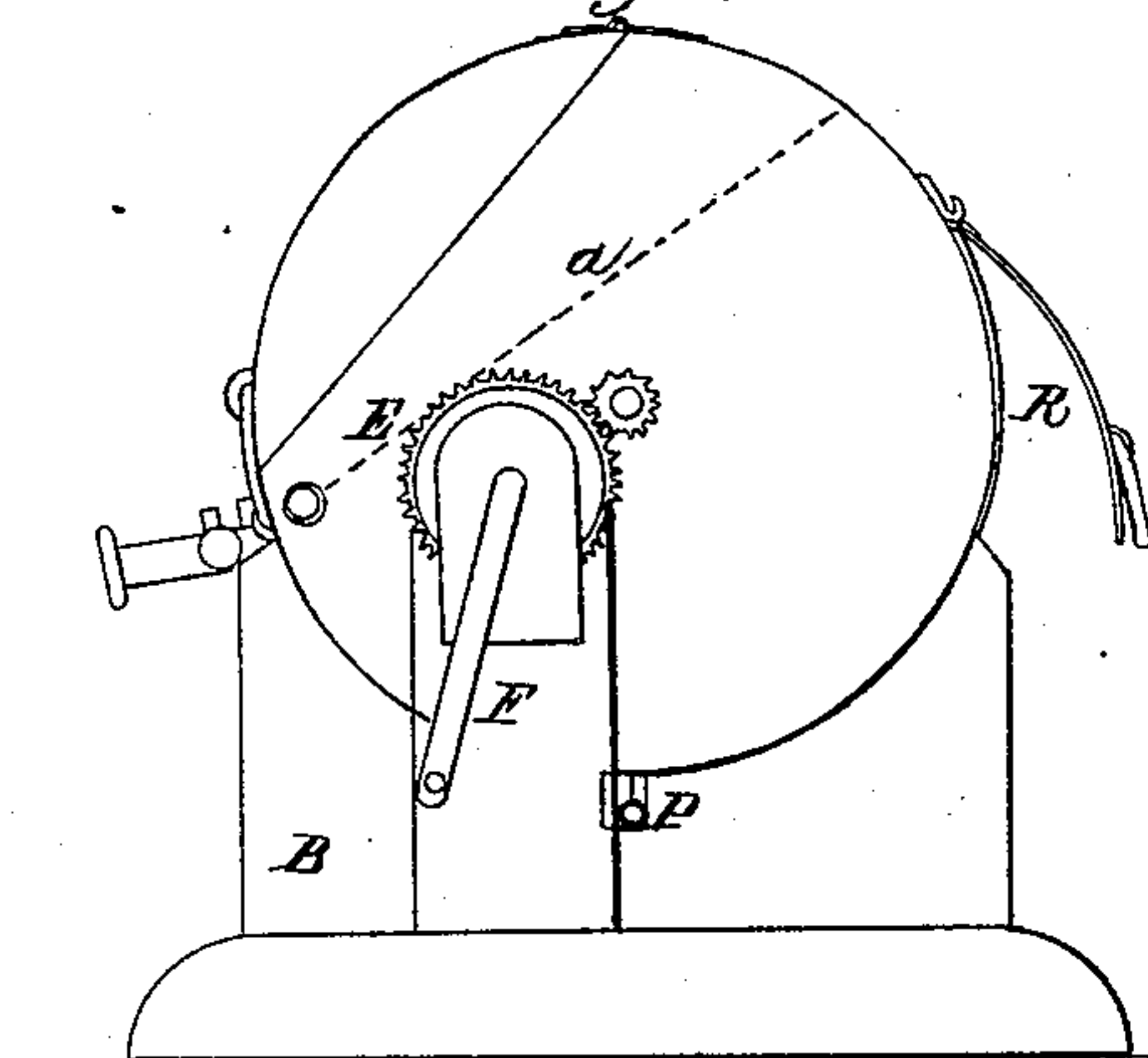
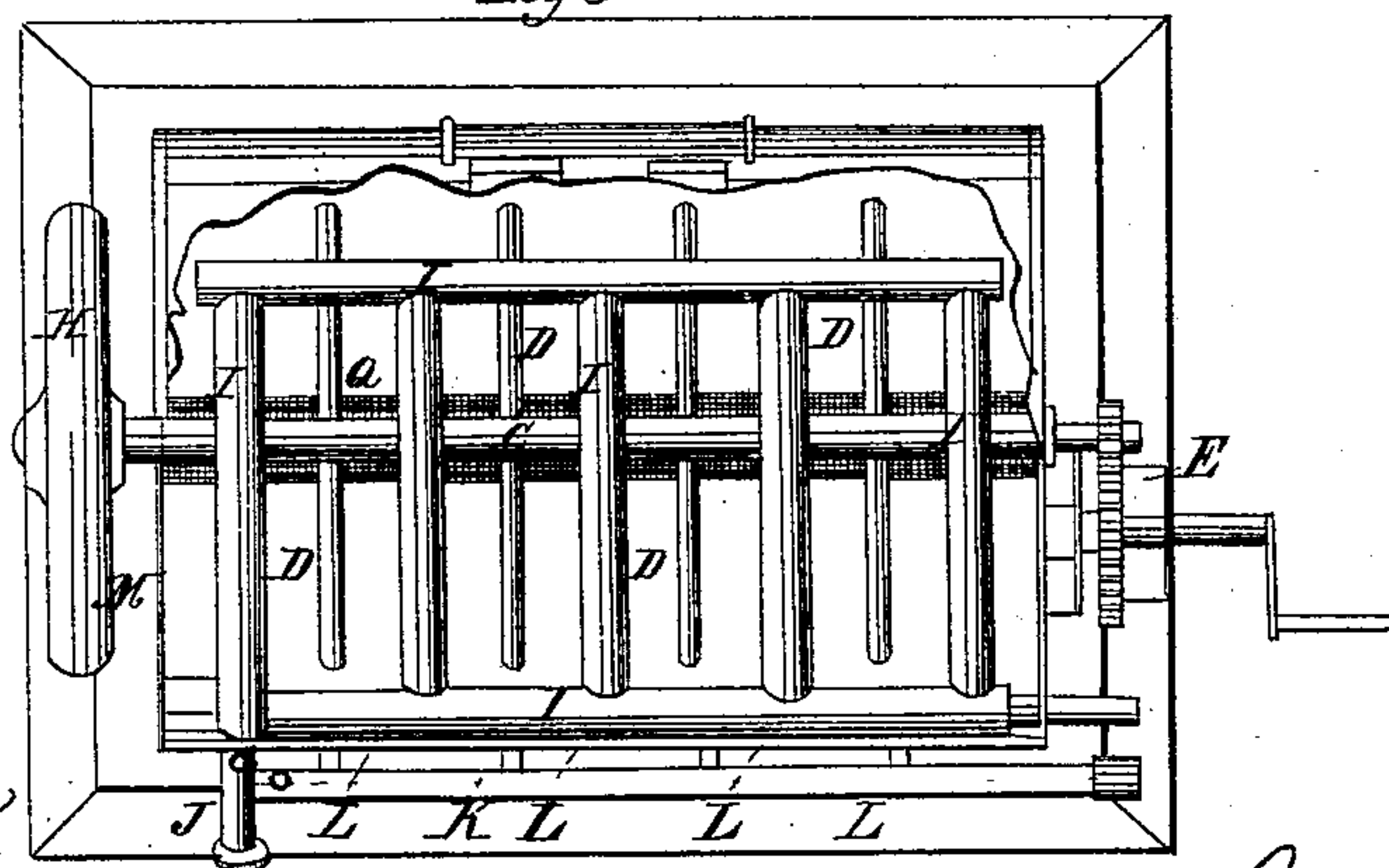


Fig. 3.



Witnesses:  
J. H. Burridge  
Frank S. Alden

Inventor:  
U. B. Waddle

# United States Patent Office.

URIAH B. WADDLE, OF CLEVELAND, OHIO.

*Letters Patent No. 71,555, dated November 26, 1867.*

## IMPROVED FEATHER-RENOVATOR.

*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, U. B. WADDLE, of Cleveland, in the county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Feather-Renovators, &c.; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of the renovator.

Figure 2 is a view of the end.

Figure 3, a longitudinal section.

Like letters refer to like parts in the views.

A, fig. 1, is a cylindrical case mounted upon and supported by the sides B. Longitudinally through the centre of this cylinder is projected a shaft, C, fig. 3, from which project the arms D. The shaft and arms are made to revolve by the gearing and crank E attached to the end of the cylinder, by means of the bracket F. On the opposite end of the shaft is a balance-wheel, H. Across the upper side of the cylinder is arranged a series of steam-pipes, I, fig. 3, the position of which is indicated by the dotted lines *a*, fig. 2. Steam is conducted into this arrangement of pipes through the pipe J, and also into the cylinder, through the pipe K, by means of the short induction-pipes L.

The practical operation of this machine is as follows, viz: The feathers are thrown into the cylinder through the door M, which is then closed by the cover N, fig. 1, and made fast by the hook O. Steam generated by any appropriate means is then inducted, through the pipes L, into the cylinder, among the feathers, which are then stirred and shook up, by the revolving arms D, until thoroughly steamed; the condensed steam and dirt passing off through the conductors P, arranged along the bottom of the case, a screen, Q, being placed over it to keep back the feathers, which, on being properly and sufficiently treated, the steam is then shut off from the cylinder, and the feathers dried by tossing them up against and between the pipes I, heated by the steam shut off from the cylinder. By this means they are quickly and thoroughly dried, and are then removed through a small door, R, on the opposite lower side of the case.

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

1. The drying-pipes I, arranged within a stationary cylinder or case, A, in combination with the arms D and shaft C, when operated in the manner as and for the purpose set forth.

2. The steam-pipes K L, conductor P, provided with a screen, Q, as arranged in combination with the case A, for the purpose and in the manner as set forth.

U. B. WADDLE.

Witnesses:

W. H. BURRIDGE,

FRANK S. ALDEN.