

M. VON BEUST,
Mixing and Sifting Machines.

No. 147,296.

Patented Feb. 10, 1874.

Fig. 1.

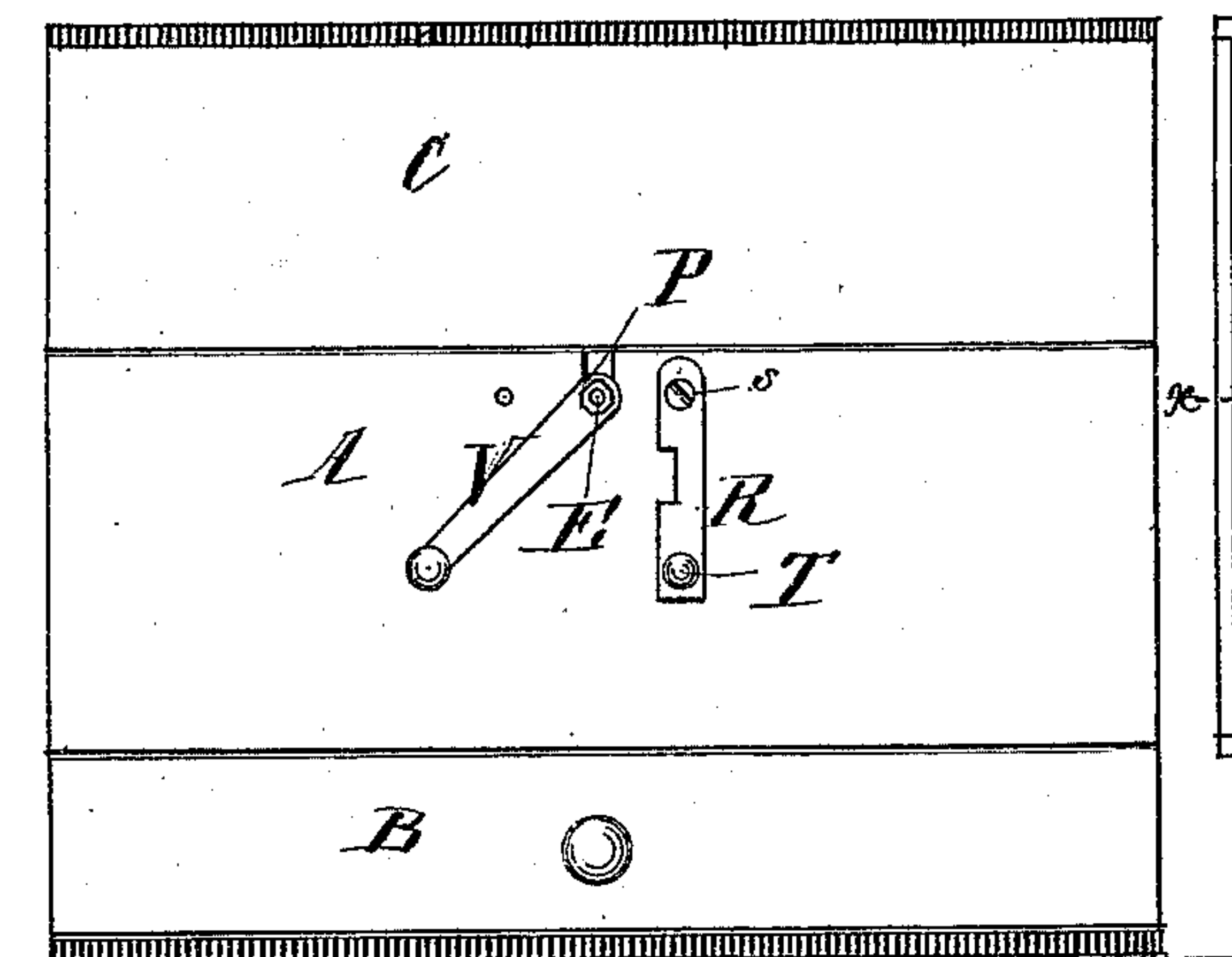


Fig. 2.

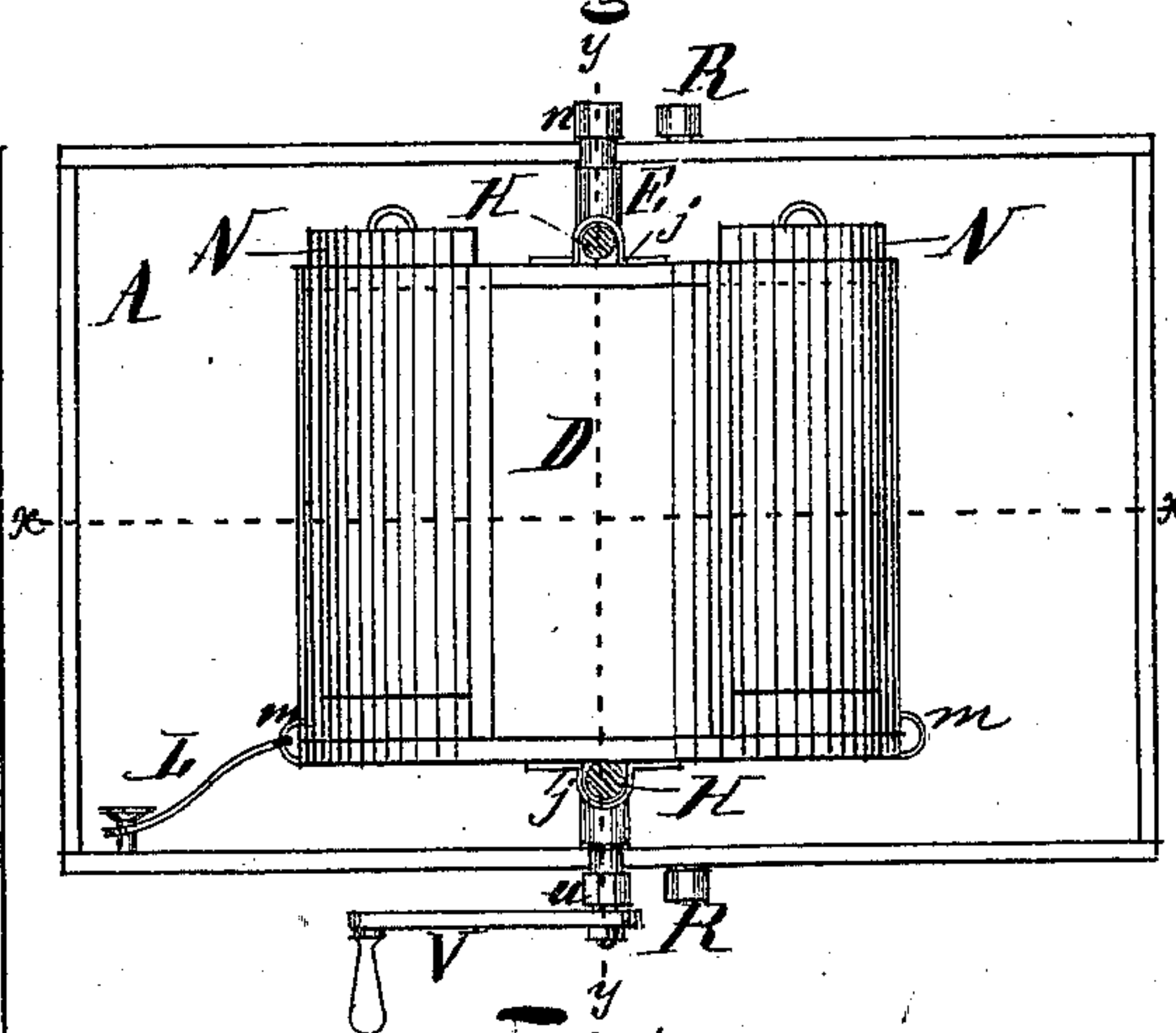
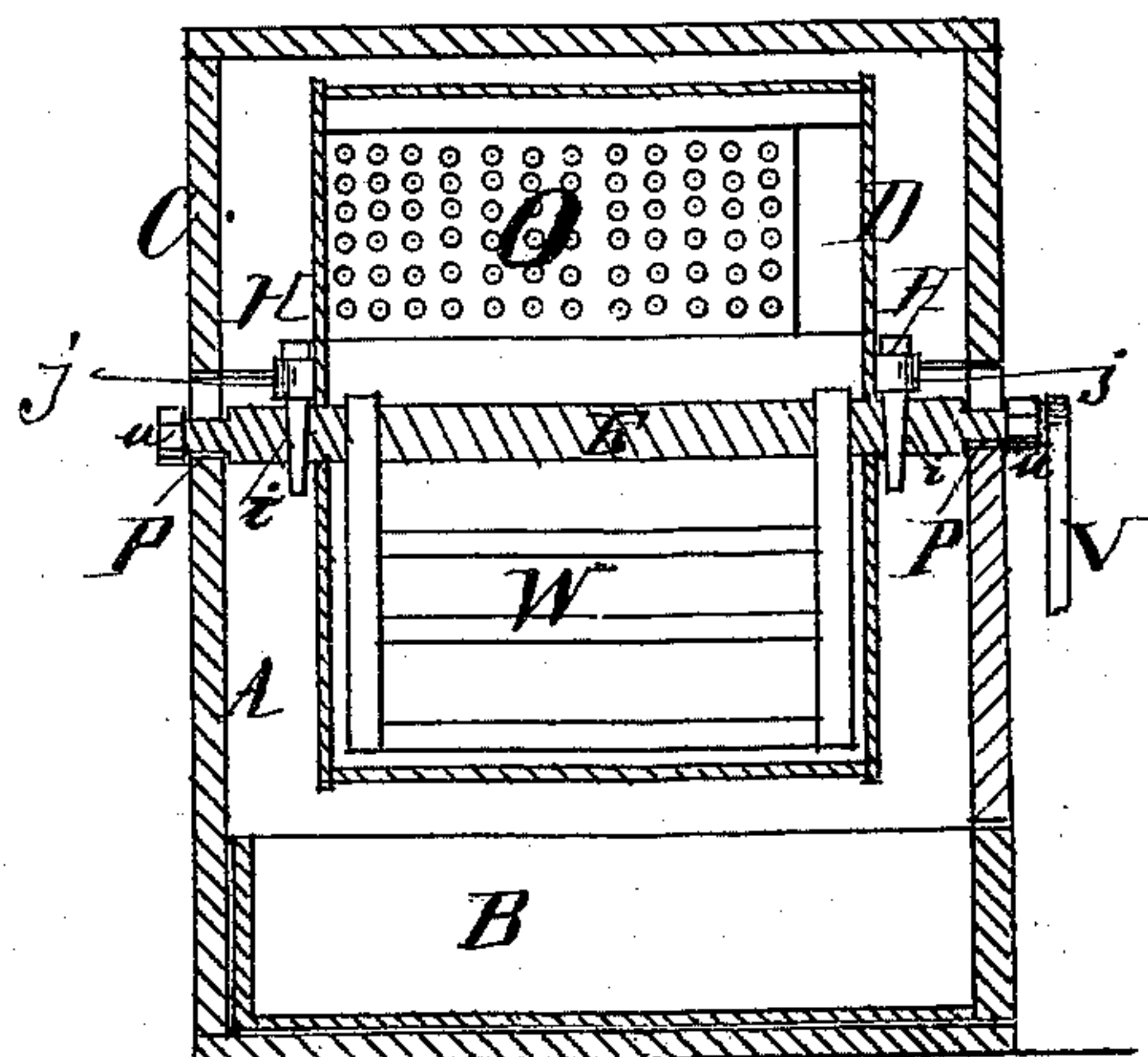
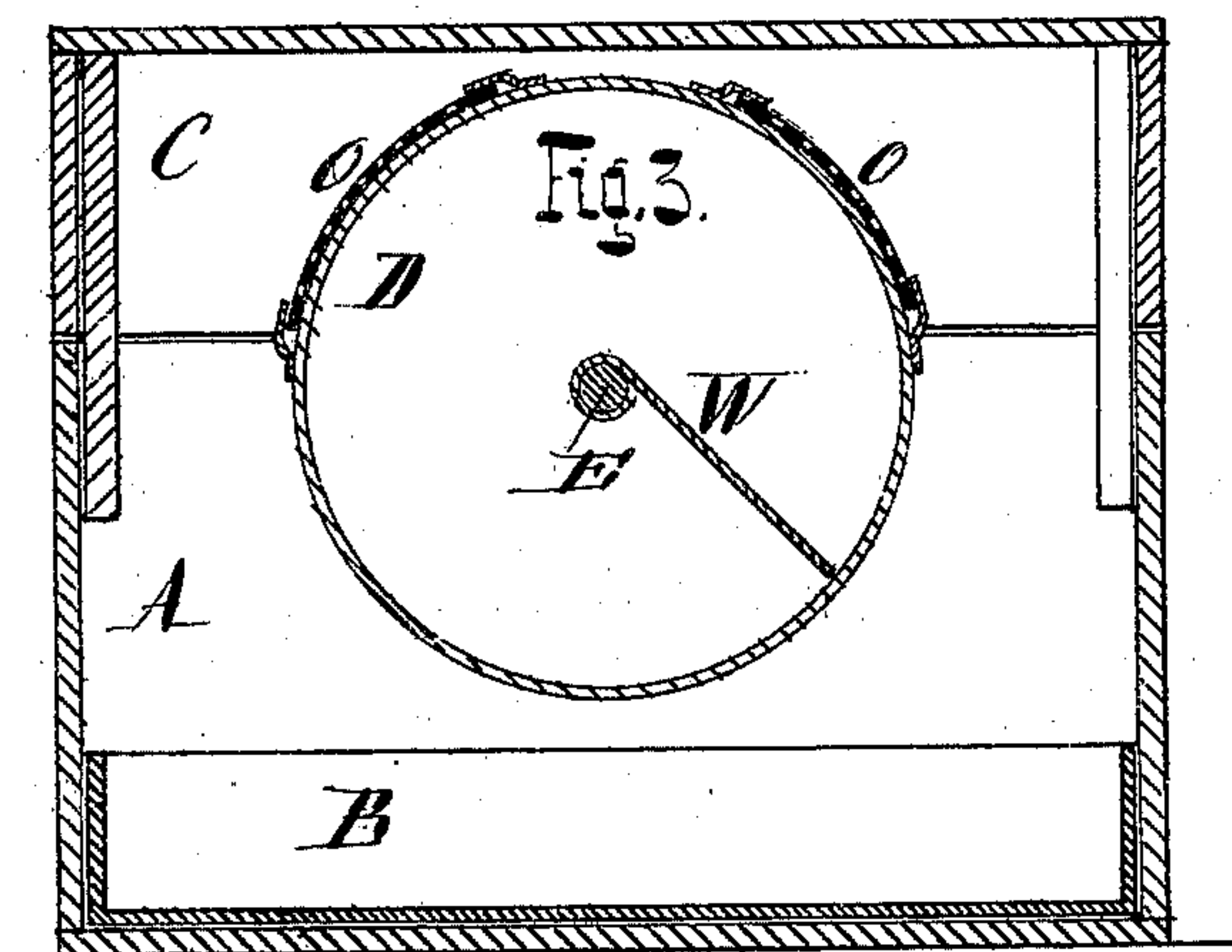


Fig. 4.



Witnesses:

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MAX VON BEUST, OF NEW ALBANY, INDIANA.

IMPROVEMENT IN MIXING AND SIFTING MACHINES.

Specification forming part of Letters Patent No. 147,296, dated February 10, 1874; application filed November 8, 1873.

To all whom it may concern:

Be it known that I, MAX VON BEUST, of New Albany, county of Floyd, State of Indiana, have invented certain Improvements in Mixing and Sifting Machines, of which the following is a specification:

The object of my invention is to provide for a cheap and simple mixing and sifting machine with changeable sieves, for all kinds of drugs and powders.

It is very desirable that the mixing and sifting of powders, pulverized and fine drugs should be done in the same machine, in order to save time and labor, as well as for preventing waste.

My invention consists in constructing and placing a drum with a horizontal axle in the center, on which the drum may be revolved when sifting is required.

In case of mixing, the drum is made stationary, and the axle revolves inside the drum. The journals of the axle are placed in the upper part of a box, which is provided with a drawer in the bottom to receive the siftings or the mixed powder. This box is provided with a tightly-closing lid, which prevents the escape of powder in the form of dust. When the machine is used for mixing powder or drugs, the same being introduced through a sliding door in the top of the drum, two pins on the side of the drum are removed, which hold the axle to the drum, and the drum is made stationary to the box by aid of a hook fastened to the box and an eye placed on the drum. To the part of the axle inside the box is fastened a mixer in the form of a grate, which serves to stir up and thoroughly mix the powders or drugs in the drum.

When the machine is used for sifting, the sliding doors are removed and substituted by sieves of different numbers or openings, as the drugs or powders require, the pins holding the drum to the axle replaced, and the hook holding the drum to the box removed. By turning the handle of the axle, the contents of the drum will be sifted through the sliding sieves and be deposited in the drawer.

In order to give the drum a shaking, which assists materially both in sifting and mixing

certain classes of drugs or powder, I have provided for extra hinged journals, which may be used or removed at will, and are placed outside of the box. By making the parts of the axle which revolve in these extra journals of square or octagonal form, the desired shaking of the drum is produced.

In order to more fully describe my invention, I refer to the accompanying drawing forming a part of this specification.

Figure I is a side view of a mixing and sifting machine embodying my invention. Fig. II is a plan view of the same with the cover removed. Fig. III is a sectional view through line *x x*, Fig. II. Fig. IV is a sectional view through line *y y*, Fig. II.

A is the box; B, the drawer; C, the lid of the box; D, the drum; E, the axle, resting either in journals P P or the extra hinged journals R R; H H, the pins, placed in the holes *i i* in the axles, and in the guards *j j* on the sides of the drum when it is required to revolve the drum. L is a hook, hinged to the box, and placed in the eye *m* on the drum when it is required only to revolve the mixer W inside the drum. N N are sliding doors in the circumference of the drum, which are substituted by sliding changeable sieves O O, when required. P P are journals for the axle E. R R are extra journals, pivoted at *s s* to the box A, and resting on pins T T when it is required that the octagonal-shaped parts *u u* of the axle E shall revolve in these extra journals. V is the handle of the axle E.

Having thus described my invention, I desire to claim—

1. The revolving drum D, provided with the removable sieves O O, and axle E, having angular bearings *u u*, in combination with the box A and hinged journals R R, substantially as described.

2. The stationary drum D, provided with the slides N N, in combination with the axle E and mixer W, substantially as described.

MAX VON BEUST.

Witnesses:

CHAS. ELLIS,
BENJ. NEWELL.