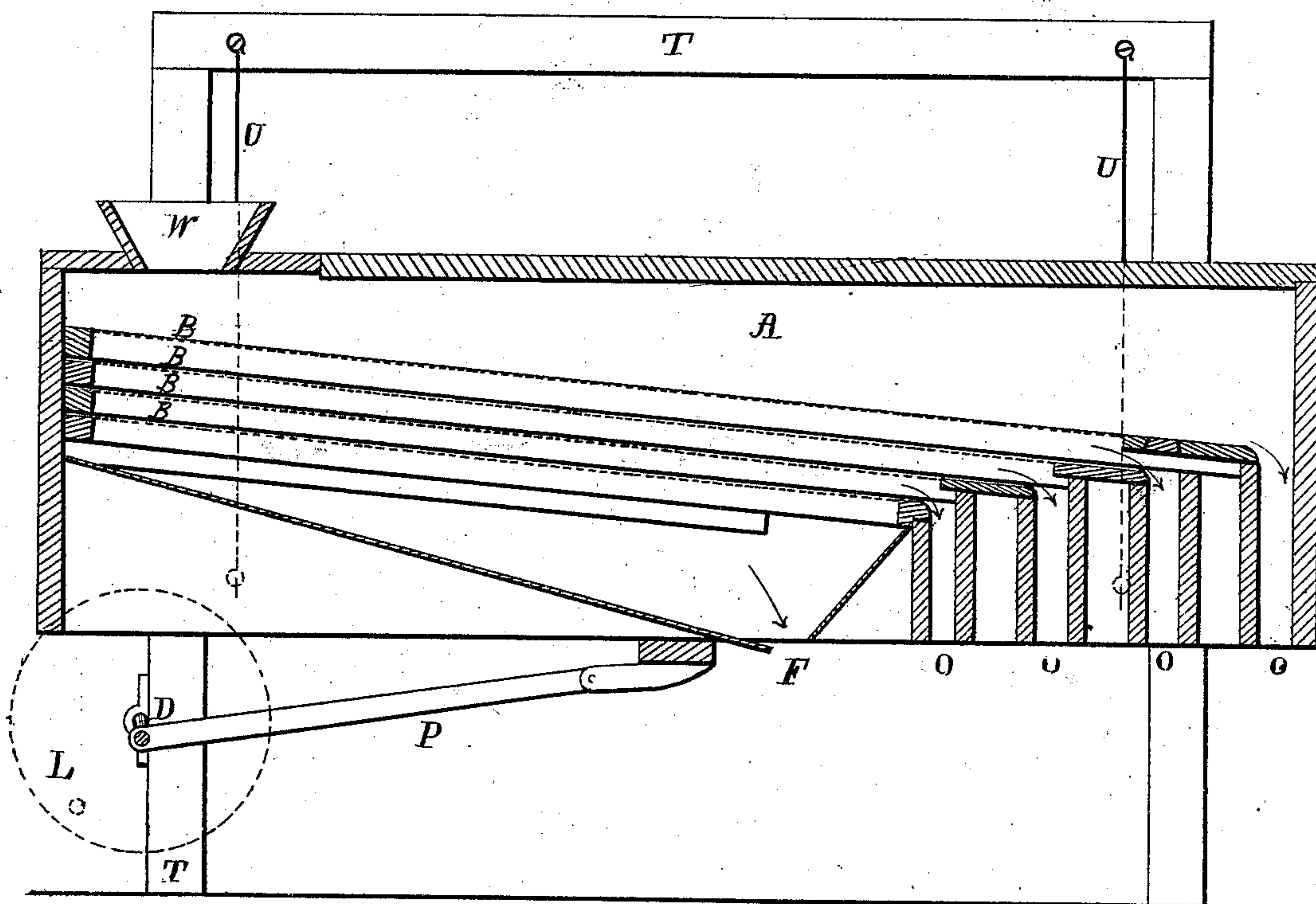


J. TURNER.
BOLTING APPARATUS.

No. 174,392.

Patented March 7, 1876.



Witnesses:

Milton Watt.
J. O. Whitmore.

Inventor:

John Turner.

UNITED STATES PATENT OFFICE.

JOHN TURNER, OF OAKDALE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS
RIGHT TO HENRY C. McEWEN, OF SAME PLACE.

IMPROVEMENT IN BOLTING APPARATUS.

Specification forming part of Letters Patent No. **174,392**, dated March 7, 1876; application filed
November 1, 1875.

To all whom it may concern:

Be it known that I, JOHN TURNER, of Oakdale, Allegheny county, Pennsylvania, have invented a Bolting Apparatus, of which the following is a specification:

My invention has for its object to furnish an improved flour-bolting machine, simple in its construction, convenient in use, and effective in operation, bolting the ground meal, as it comes from the burr or grinding apparatus, in a very short time, separating the different grades, as now done by the common or old bolting-chest, in a very effective manner, with very little power; and it consists in a set of frames of suitable dimensions, to put the bolting-cloths on, which are firmly fastened on the frames. The cloths are different grades, the upper one being the one for taking out the bran, the second for fine bran and shorts, the third one for middlings, the fourth for flour, which passes down through into its outlet. What goes over this cloth is called "returns," and is to be ground and bolted over, at the discretion of the operator. The frames, with their cloths, are placed in a suitable box, A, which is about four times as long as wide, and about three-fourths its depth in breadth. At the one end of the box A are placed the outlets O, one for each frame B, with a division between each outlet O. The frames B are placed in the box A at about five-eighths of an inch

of elevation to the foot from the outlet end to the receiving end.

The operation is as follows: The box A is suspended in such a way that it can be given a vibrating motion; then the meal from the burr is let in through the passage W at the higher end of the box A. The first cloth B takes out the bran; the flour passes on down to the second cloth, where it is separated from the shorts; passes on down to the third cloth, where it is relieved of its middlings; passes to the fourth cloth, where it is separated from the returns. The flour then passes down its outlet.

Each cloth greatly facilitates the operation of the one below it by relieving the flour of the coarser particles that would obstruct the meshes.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the bolting-cloths, arranged on frames B B B B within the vibrating box A, the coarsest cloth uppermost, with the feed-passage W and the outlets O O O O, substantially as described.

JOHN TURNER.

Witnesses:

R. POTTER,
HENRY C. McEWEN.