

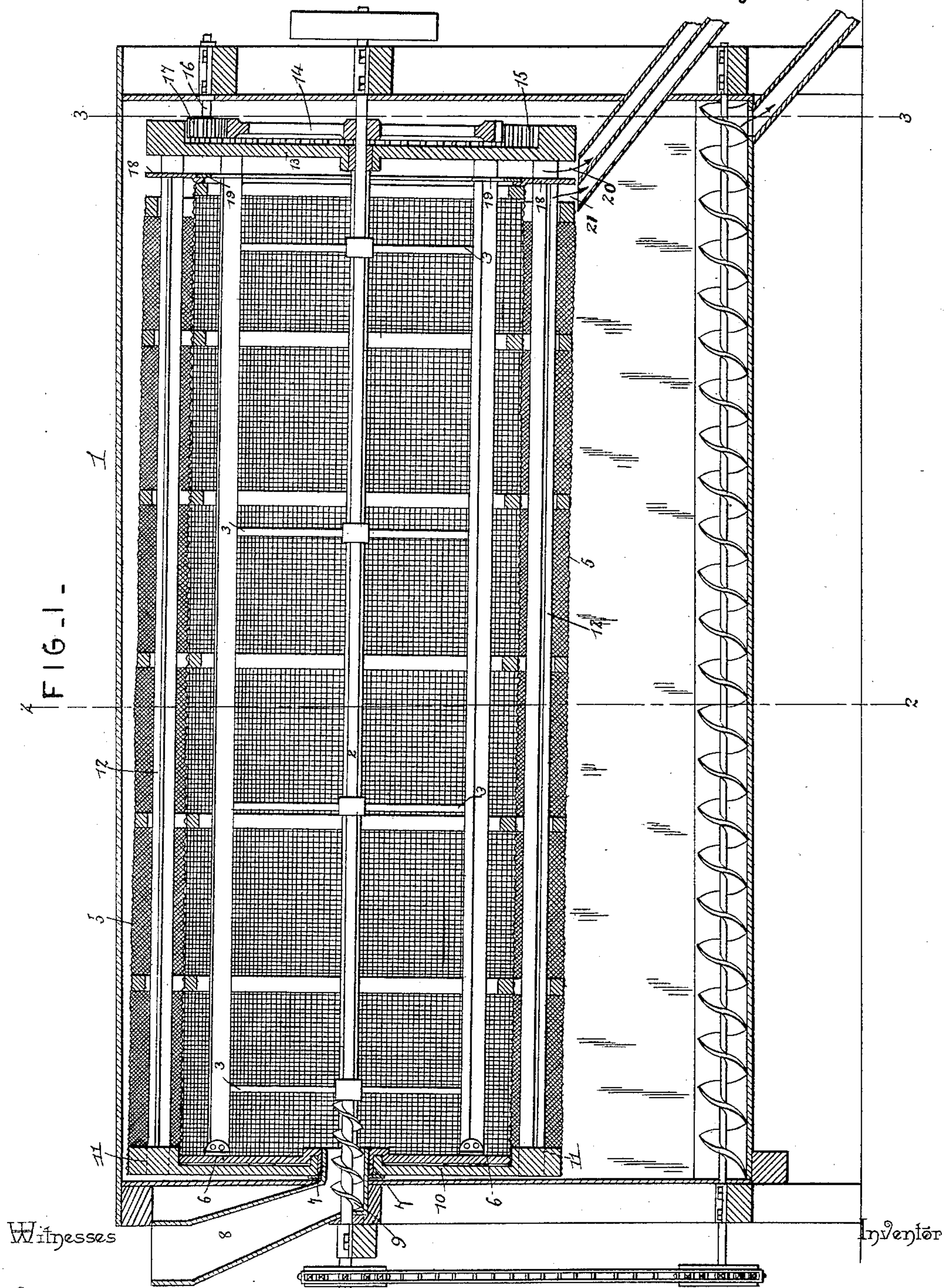
(No Model.)

3 Sheets—Sheet 1.

P. SADRAVEZT.  
FLOUR SEPARATOR.

No. 433,096.

Patented July 29, 1890.



Jas. K. McEachern  
Wm. Bagges

By his Attorneys,

Peter Sadravezt

C. A. Snow & Co.



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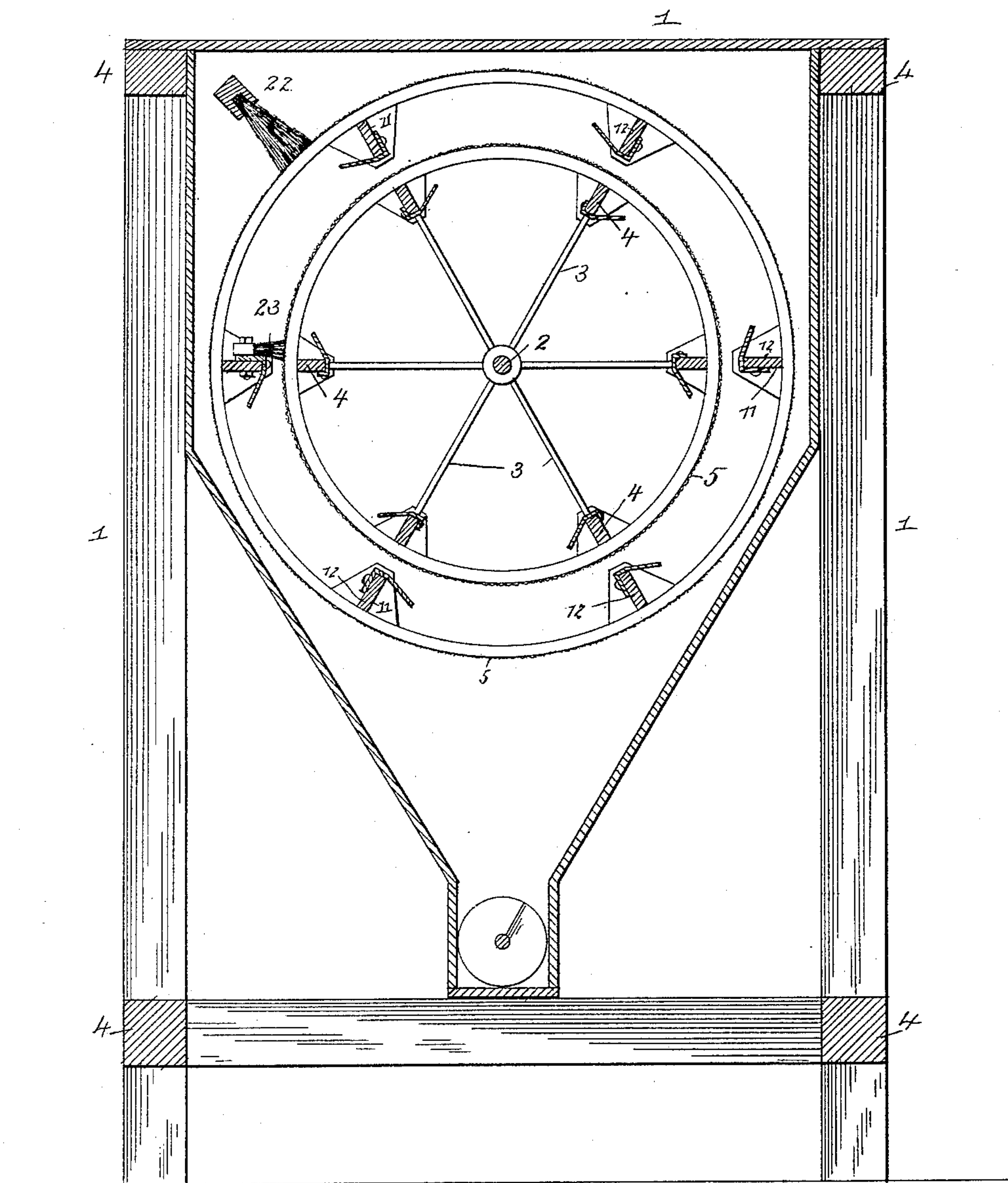
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FIG. 2.



Witnesses

Inventor

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(No Model.)

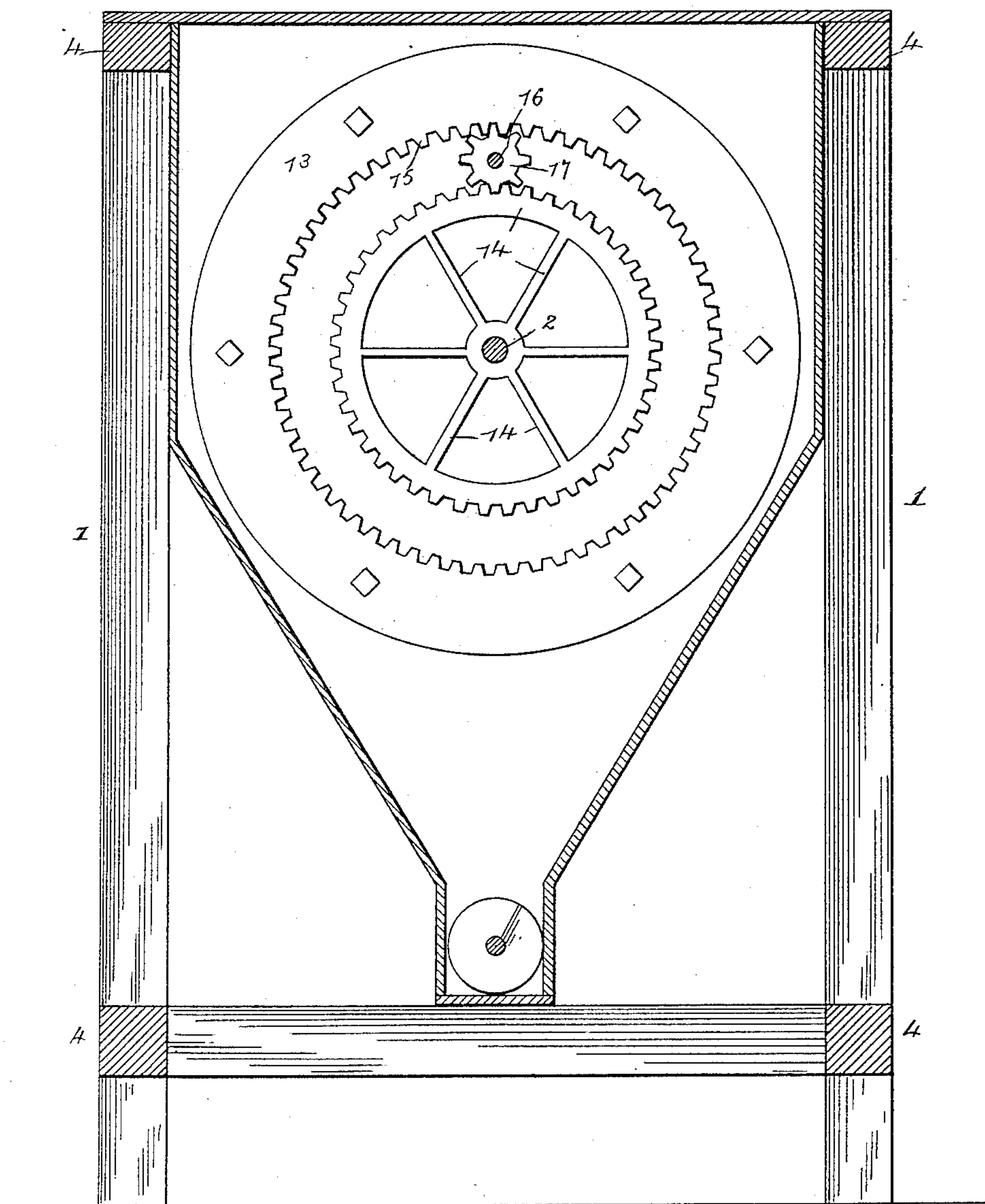
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FIG. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

PETER SADRAVEZT, OF SAN ANTONIO, TEXAS.

## FLOUR-SEPARATOR.

SPECIFICATION forming part of Letters Patent No. 433,096, dated July 29, 1890.

Application filed May 3, 1890. Serial No. 350,505. (No model.)

*To all whom it may concern:*

Be it known that I, PETER SADRAVEZT, a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented a new and useful Flour-Separator, of which the following is a specification.

This invention relates to rotary bolts or flour-separators; and it has for its object to construct a machine of this class by means of which by a single operation the flour may be separated from the middlings and the fine from the coarser grade of middlings, thus performing at a single operation that which heretofore has required two separate operations to accomplish.

With this object in view, my invention consists in the arrangement within a suitable casing of two bolting-cylinders, one within the other, the details of construction and arrangement of parts being as will be herein-after fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a longitudinal sectional view of a machine embodying my improvements. Fig. 2 is a transverse sectional view of the same taken on the line 2 2 in Fig. 1. Fig. 3 is a transverse sectional view taken on the line 3 3 in Fig. 1.

Like numerals of reference indicate like parts in all the figures.

1 designates the frame or casing of the machine, which is provided with bearings for the shaft 2, which is provided with radial arms 3, which are connected by means of longitudinal frame-bars 4, to which the covering 5, which is preferably constructed of wire-cloth of suitable mesh is secured. At one end of the inner cylinder thus formed is secured the head 6, which is provided with a central opening 7, through which extends the feed-spout 8, within which is located a spiral feed-flange 9, which is secured upon the shaft 2.

10 designates the head of the outer cylinder. Said head is mounted to revolve upon the hub of the disk or head 6. The said head is provided with a flange 11, having recesses in which are secured the longitudinal frame-bars 12. The opposite ends of said frame-bars are mounted in or attached to a disk 13, which is mounted upon the shaft 2 at the opposite end of the casing.

Secured upon the shaft 2 of the discharge end of the inner cylinder is a wheel or spider 14, which is peripherally toothed, as will be seen in Fig. 3. The disk 13, at the tail end of the outer cylinder, is provided with an internally-toothed flange 15.

16 designates a short shaft journaled in suitable bearings and carrying a pinion 17 that meshes with the toothed wheel or disk 14 and with the internally-toothed flange 15. It will be seen that by this construction when the shaft carrying the inner cylinder is rotated rotary motion in an opposite direction will be transmitted to the outer cylinder. The discharge end of the inner cylinder is extended beyond the discharge end of the outer cylinder, and is provided with an exterior annular flange 18, engaging an interior annular flange 19, secured to the outer cylinder-frame, thus forming a cut-off to prevent the material discharged from the inner and outer cylinders from being mixed.

20 and 21 designate the discharge-openings that receive the discharge from the inner and outer cylinders respectively. The material that sifts through the outer cylinder passes into the bottom of the casing, which is hopper-shaped and in which the spiral conveyer may be arranged to conduct it to some suitable receptacle.

Suitably arranged longitudinally in one of the upper corners of the casing is a brush 22, which bears against the cover of the outer cylinder, which may be of ordinary silk bolting-cloth. Suitably attached to one of the longitudinal frame-bars of the outer cylinder is a similar brush 23, which bears against the outside of the inner cylinder. These brushes in practice serve to prevent the material with which the cylinders are covered from being clogged.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains. The material which is to be separated is fed through the spout 8, the spiral-conveyer flange 9 serving to deliver it into the inner cylinder. In passing through the latter the finer are separated from the coarser particles, which latter continue their course to the discharge-open-



ing 20, while the former are discharged into the outer cylinder. By the rotation of the latter an additional separation will be performed, the finer particles resulting from 5 which are discharged into the bottom of the casing, while the coarser particles are discharged through the opening 21 at the tail end of the machine.

As will be seen from the foregoing description, the construction of my improved bolt 10 or separator is exceedingly simple, and it will be seen that it is capable of performing at a single operation that which has heretofore required two separate machines or two separate 15 operations. The principle of construction of my improved bolting-reel may with equal efficiency be applied to scalping-machines.

Having thus described my invention, I 20 claim—

1. The combination of the casing, the cylindrical screens arranged in said casing one within the other, a brush arranged in the casing and bearing against the outer cylinder, a 25 brush arranged interiorly in the outer cylinder and bearing against the inner cylinder, and mechanism for rotating the said cylindrical screens simultaneously in opposite directions, substantially as set forth.

30 2. The combination of the casing, the longitudinal shaft, a cylindrical screen mounted

upon said shaft, an outer cylindrical screen mounted to rotate around the inner screen, a spur-wheel meshing with an interiorly-toothed wheel or spider attached to the outer screen 35 and with a spur-wheel mounted upon the shaft of the inner screen, a brush arranged in the casing and bearing against the outer cylindrical screen, and a brush arranged interiorly in the outer screen and bearing 40 against the inner cylindrical screen, substantially as set forth.

3. The combination of the casing, the feed-spout, the longitudinal shaft extending through said spout and having a spiral-con- 45 veyer flange, the cylindrical screens arranged one within the other, suitable outlets arranged under the discharge ends of the respective cylinders, the brushes arranged in the casing and in the outer cylinder and bearing against 50 the outer and inner cylinders respectively, and means for rotating said cylinders simultaneously in opposite directions, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as 55 my own I have hereto affixed my signature in presence of two witnesses.

PETER SADRAVEZT.

Witnesses:

SIG. WAGNER,  
R. WAGNER.