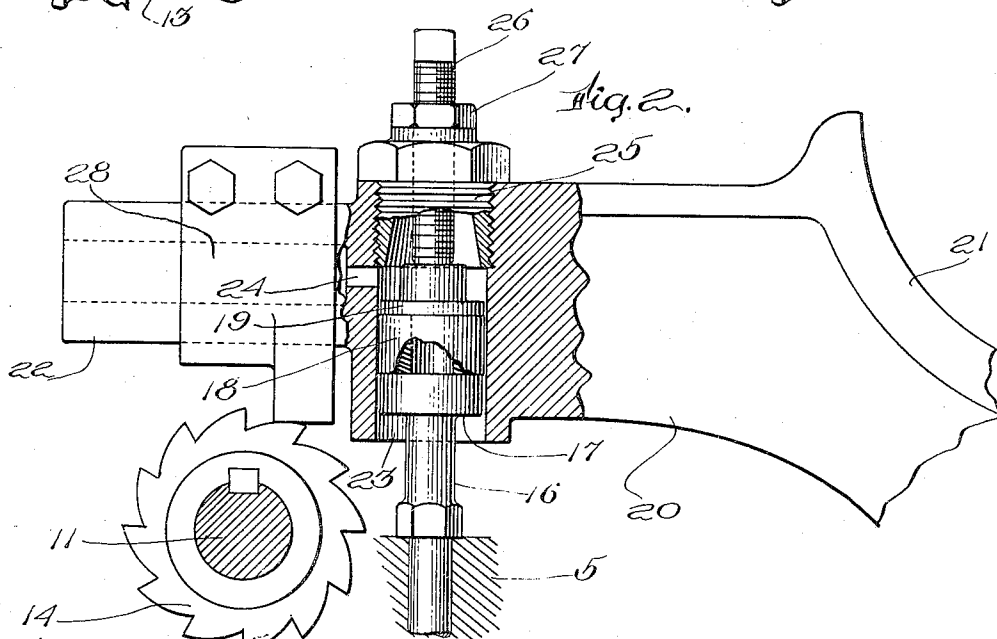
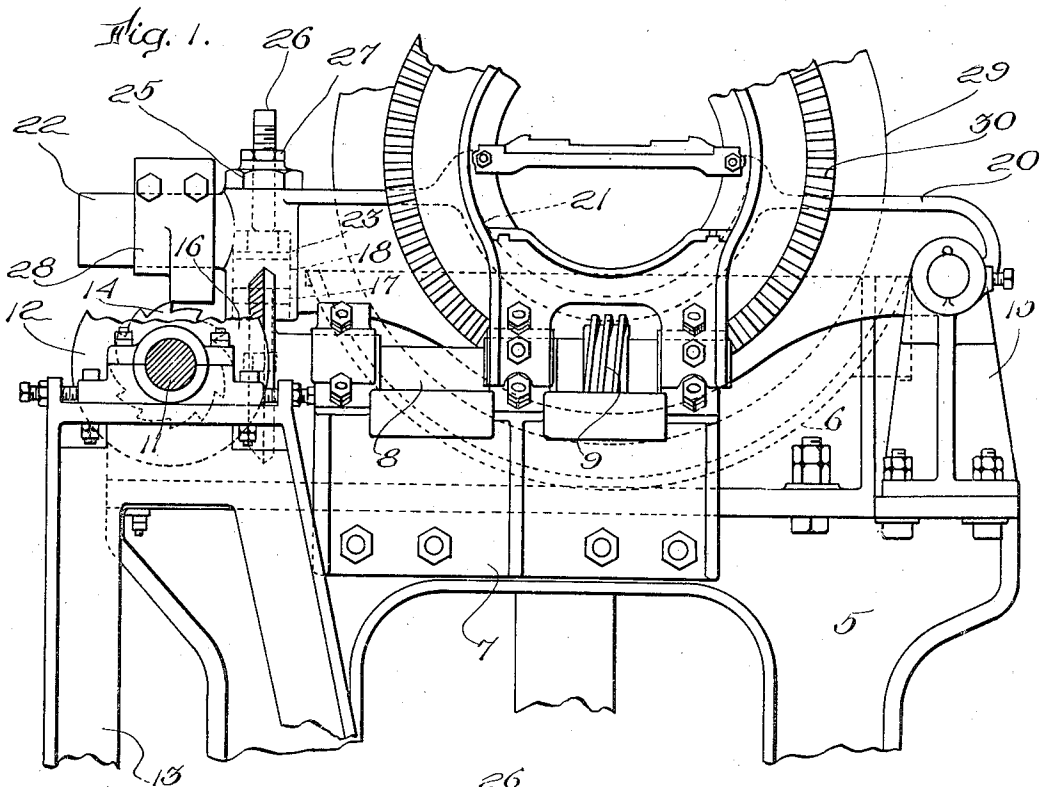


O. WANDEL.
PULP SCREENING MACHINE.
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1,036,389.

Patented Aug. 20, 1912.



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UNITED STATES PATENT OFFICE.

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PULP-SCREENING MACHINE.

1,036,389.

Specification of Letters Patent.

Patented Aug. 20, 1912.

Application filed March 11, 1912. Serial No. 683,141.

To all whom it may concern:

Be it known that I, OTTO WANDEL, of Walpole, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Pulp-Screening Machines, of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

10 This invention has reference to improvements in pulp screening machines in which a cylindrical screen is rotatably mounted on a vibratory arm or frame and is caused to rotate in a tank containing pulp and water
15 in order to gather said pulp and to carry the same around with the screen while such vibratory action of said arm or frame tends to loosen portions of the pulp so that pulpy particles of comparatively small dimensions
20 pass through the interstices of the screen.

The present invention relates more particularly to a pulp screening machine having a single cylindrical screen and one of the objects of the invention is to improve
25 the construction of the vibratory arm or frame on which the screen is carried and the means for limiting and cushioning the retractive movement of said arm or frame
30 vibration of said arm or frame.

Other objects of the invention will appear from the following description.

The invention consists in such novel features of construction and combination of
35 parts as shall hereinafter be more fully described and pointed out in the claims.

Figure 1. represents an end elevation of portions of a pulp screening machine illustrating the present invention. Fig. 2. represents an enlarged detail view of portions
40 of the same partially broken away and shown in section.

Similar numbers of reference designate corresponding parts throughout.

45 As shown in the drawings 5 indicates one of a pair of end frames of similar construction between which is supported the tank 6. On this frame 5 is mounted the member 7 having bearings in which is journaled the
50 shaft 8 having the worm 9 and the miter gear 10 which is driven from the similar gear 12 of the main shaft 11 journaled in bearings of the supplemental frame 13 and having the throw cams as 14.

55 At one end of frames as 5 are mounted

brackets as 15 and at the other end, adjacent the location of shaft 11 are fixed the vertical buffer-supports or spindles as 16 having the enlargement or head 17 adapted to receive and support the buffer 18 of rubber or other elastic material which buffer carries the anvil block 19.

Pivotally mounted on the brackets as 15 are frames or arms as 20 having bearings as 21 and reduced ends as 22 adjacent to which
65 said arms 20 have vertically disposed bores or chambers as 23 located in registry with the heads 17 of spindles 16 and of a size to receive said heads and the buffers 18 and anvil blocks 19 supported by said spindles. 70 In the wall of said chambers 23 are formed air vent perforations as 24 and the upper ends of said chambers are screw threaded to receive plugs as 25 having screw threaded bores in which are adjustably screwed the
75 thrust screws as 26 having lock-nuts as 27. On the reduced portions 22 of arm 21 are mounted the cam blocks as 28 in position to be intermittently acted on by the throws or steps of the cams as 14 during the rotation
80 of such cams.

Journaled in the bearings 21 of the arms or frames as 20 is the cylindrical screen 29 of any well known construction and having the worm gear 30 which is driven by the
85 worm 9 of the shaft 8 to effect the rotation of the screen 29 while the cams as 14 act on the cam blocks as 28 to vibrate said arms or frames as 20 and to thus effect the shaking of portions of the pulp material through the
90 screen. On the reactive movement of arm 20 the end of the thrust screw 26 strikes the anvil block 19 and the force of such blow is cushioned by the rubber buffer 18 which acts ultimately to limit the downward
95 movement of the arm or frame 20.

By this construction the rubber buffer 18 is protected from contact with oil, the screw 26 may be adjusted to vary return movement of arm 20 and if the buffer 18 becomes
100 worn plug 25 can be removed by unscrewing the same and anvil block 19 and buffer 18 can be taken out from the upper end of chamber 23, a new buffer may be then inserted in said chamber 23 and the block 19
105 placed thereon, and plug 25 can then be screwed into place. This change is preferably made when the block 28 is resting on the cam 14.

Having thus described my invention I 110

claim as new and desire to secure by Letters Patent—

1. In a pulp screening machine of the nature described, the combination with the
5 frame, a horizontal screen sustaining arm
pivotally mounted thereon and having a
bore or chamber, and a thrust pin extending
into said bore or chamber, of a spindle
mounted on the frame and extending into
10 said bore or chamber, and a yielding buffer
device carried by said spindle.

2. In a pulp screening machine of the nature described, the combination with the
frame, a shaft journaled therein, a throw
15 cam on said shaft, a spindle fixed on said

frame adjacent said cam, and a buffer carried by said spindle, of a screen carrying arm pivotally mounted on said frame and having a vertical bore adapted to receive said buffer, a screw plug secured in the upper end of said bore and having a screw threaded perforation, a thrust screw adjustably mounted in said perforation, and a cam block mounted on the free end of said arm and adapted to be acted upon by said cam, substantially as described.

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Witnesses:

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