

C. RACH.  
 ROTARY PRESS.  
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1,018,267.

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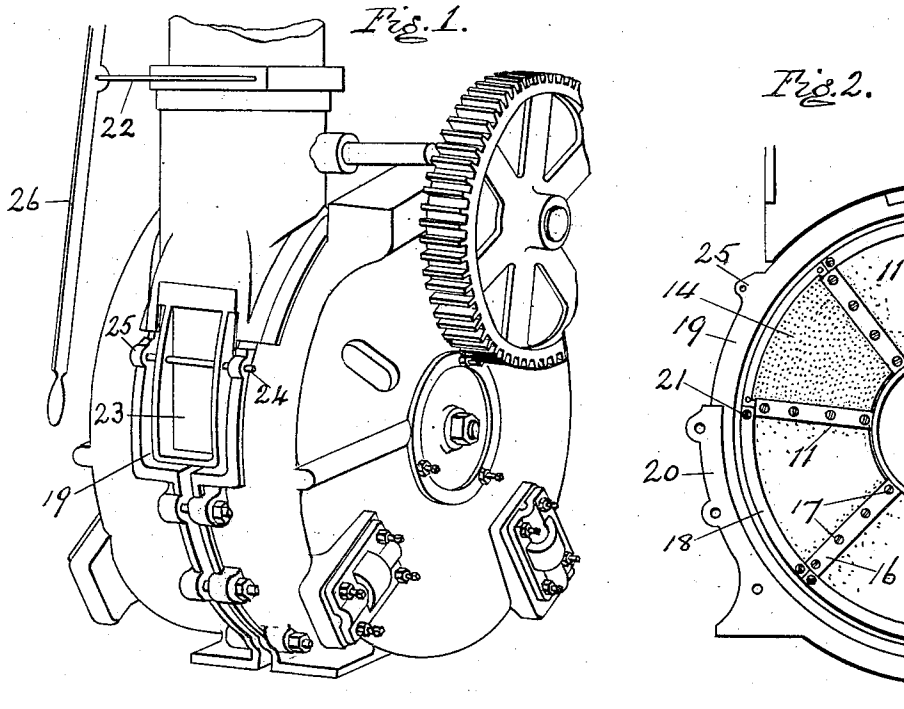
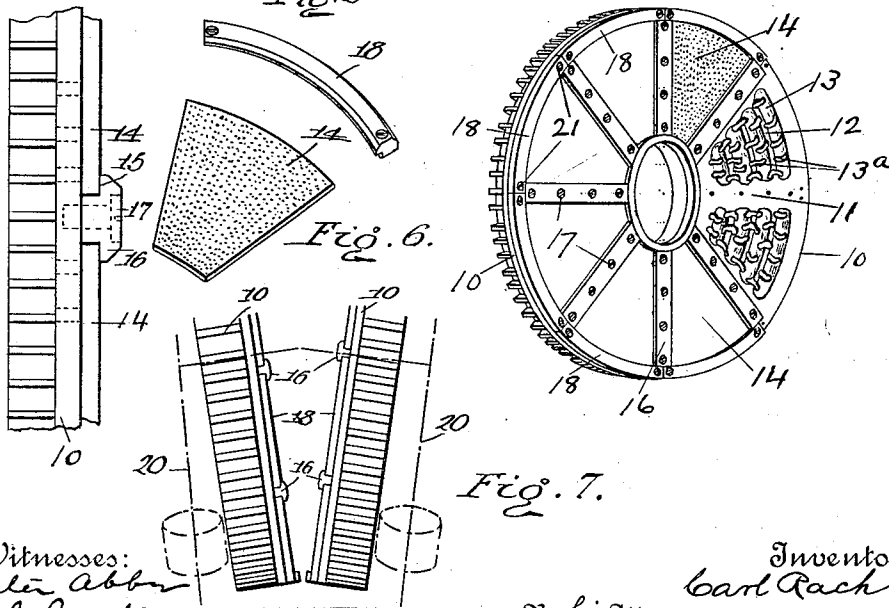


Fig. 4.

Fig. 5.

Fig. 3.



Witnesses:  
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Inventor  
*Carl Rach*  
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# UNITED STATES PATENT OFFICE.

CARL RACH, OF STAPLETON, NEW YORK.

## ROTARY PRESS.

1,018,267.

Specification of Letters Patent.

Patented Feb. 20, 1912.

Application filed March 18, 1911. Serial No. 615,245.

*To all whom it may concern:*

Be it known that I, CARL RACH, a subject of the King of Prussia, and residing at Stapleton, in the county of Richmond, State of New York, have invented a certain new and useful Improvement in Rotary Presses, of which the following is a specification.

My invention relates to rotary presses and particularly to presses of the type commonly used by brewers for drying grain after it has passed through the "mash", the object of my invention being to improve the same in several features, particularly with reference to facilitating the cleansing of the screens and pressing disks, as will be more fully explained hereafter.

In the accompanying drawings, Figure 1 is a broken perspective of a press of the character referred to, in which my invention is embodied; Fig. 2 is a vertical section through a portion of the same showing one of the wedge members of the press in position for the removal of a screen; Fig. 3 is a perspective of one of the pressing disks, with some of the screens removed; Fig. 4 is an edge elevation of the disk with the slide plates and screen disproportionately enlarged; and Fig. 5 is a perspective of a detail. Fig. 6 is a perspective of one of the removable segment plates; and Fig. 7 is a broken elevation diagrammatically showing the inclined position of the wedge pressing disks within the casing.

In rotary wedge presses of the character to which my invention particularly relates, it is now necessary to dismantle the press in order to get at the rotary pressure disks within the casing when said disks are to be cleaned. This is in part due to the fact that the screens which face the disks are screwed fast to the latter and cannot be removed, in order to obtain access to the drainage channels until the casing has been opened and the disks dismounted. To obviate this laborious method of procedure, I now propose to mount the screen segments in slide-ways upon the disks and provide a port in the casing through which the segments may be removed and the disks thus cleaned without dismantling the entire press. These slides may be formed upon the disks in various ways. I have illustrated a simple method of doing this. The disks 10 comprise the usual radial arms 11 between which extend the segments 12 with drain-

age channels 13 communicating with the holes 13<sup>a</sup> which pass therethrough. The juxtaposed faces of these disks are covered with the independent segmental screens 14 which slide beneath the undercut edges 15 of the slide bars 16. The latter overlie the radial arms 11 and are secured thereto by screws 17. After the perforated screen has been slid into position beneath the edges of the slide bars 16, they are held by segmental arc pieces 18 which are screwed onto the periphery of the disk and thus form abutments which prevent the screens from coming out. The port 19 (Fig. 2) in the casing 20 is made of such size that a screen 14 may be slid out after the readily accessible screws 21, which hold the arc pieces 18, have been unscrewed and the latter removed.

The manner of removing the screens is readily understood. To obtain access to the interior of the press, the door 23 is opened by removing the retaining pin 24 which passes through the perforated ears 25 on the casing and then lifting the door out of the way. The pressure disks 10 are thus accessible through the opened port 19 in the casing. Either or both of the disks are rotated to a position such as illustrated in Fig. 2, in which a screen 14 registers with the port 19. The segmental retaining arc 18 for this screen is unscrewed and removed whereupon the screen may be readily slid out of the grooves formed by the undercut edges of the radial slide bars 16 which overlie the opposite edges of the screen. If another screen is to be removed, the disk 10 is rotated to bring this second screen opposite port 19, whereupon the operation just described is repeated. Obviously if all the screens be removed, the drainage channels 13 of the entire disk are exposed and any obstruction thereof removed, while the press as a whole is thereby opened and may be generally washed out and cleaned. If any of the screens appears to have been damaged it may be repaired or renewed before replacing in position on the disk. To remount the screens upon the disk involves just the reverse of the operations described for the removal of the screen. That is, the screens are slid in beneath the under cut edges of the radial slide bars 16, the segmental retaining arcs 18 screwed in position and the port 19 finally closed by the replaced door 23.

Another feature of my invention is the

slide valve 22 operated by the handle 26, by which the pressure of the grain as it flows into the press may be controlled. Heretofore the flow has been controlled only by the quantity of the grain in the hopper above the press and varies as the quantity in, and therefore the pressure from, the hopper varies. Inasmuch as the function of the press is materially affected by the pressure of the grain as it flows in, it is highly desirable to regulate this in some manner such as that indicated. Obviously however the particular style of valve employed is not material, and I do not limit myself to the particular form illustrated.

I claim as my invention:—

1. A rotary press of the character described having a disk with channeled face, slide-ways on said face and a series of segmental perforated screens confined in said slide-ways, for the purpose specified.

2. A rotary press of the character de-

scribed having a disk with channeled face, slide-ways on said face and a series of segmental perforated screens confined in said slide-ways, in combination with a series of segmental arc pieces detachably secured to the periphery of the disk and serving to confine said segmental screens in position.

3. A rotary press of the character described having a disk with channeled face, slide-ways on said face and a series of segmental perforated screens confined in said slide-ways, in combination with a casing surrounding said disk and provided with a port through which one of said screens may be readily removed.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

CARL RACH.

Witnesses:

WALTER ABBE,  
L. H. GROTE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."