S. PRESTWICH.

CONTROL FOR EXTRACTORS.

APPLICATION FILED FEB. 8, 1917.

1,392,352.

Patented Oct. 4, 1921.

3 SHEETS—SHEET 1.

Fig. 2.

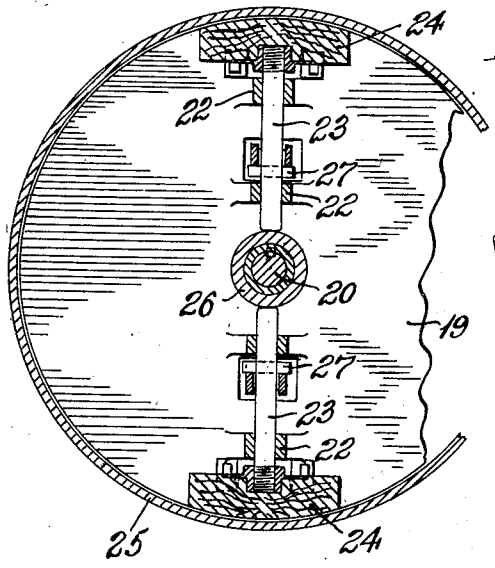


Fig. 1.

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3 SHEETS—SHEET 2.

Fig. 4

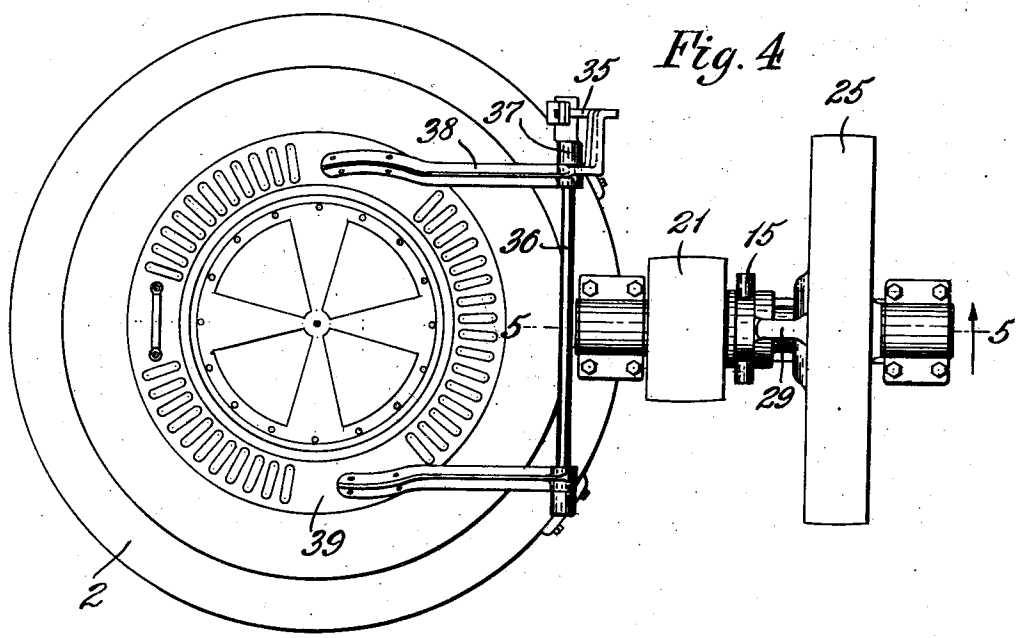
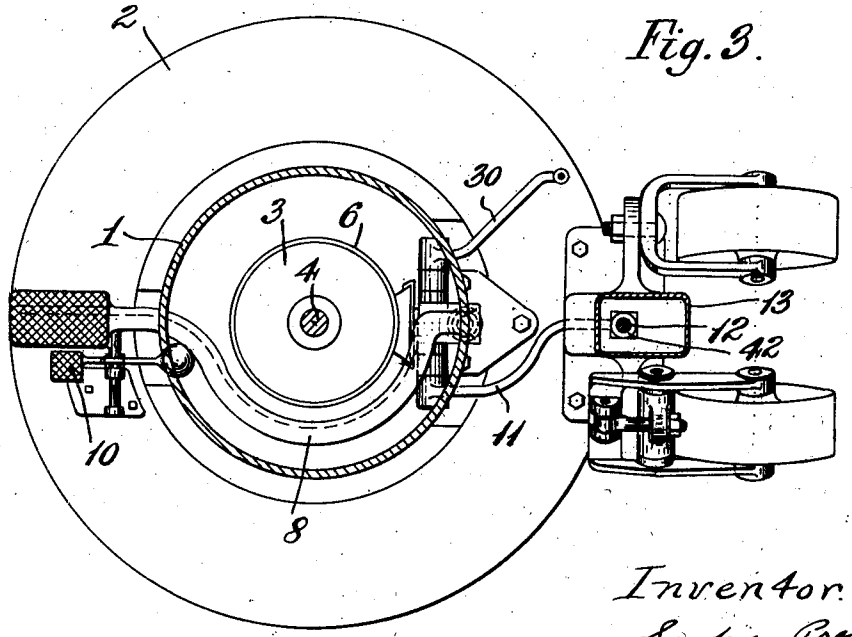


Fig. 3.



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3 SHEETS—SHEET 3.

Fig. 5.

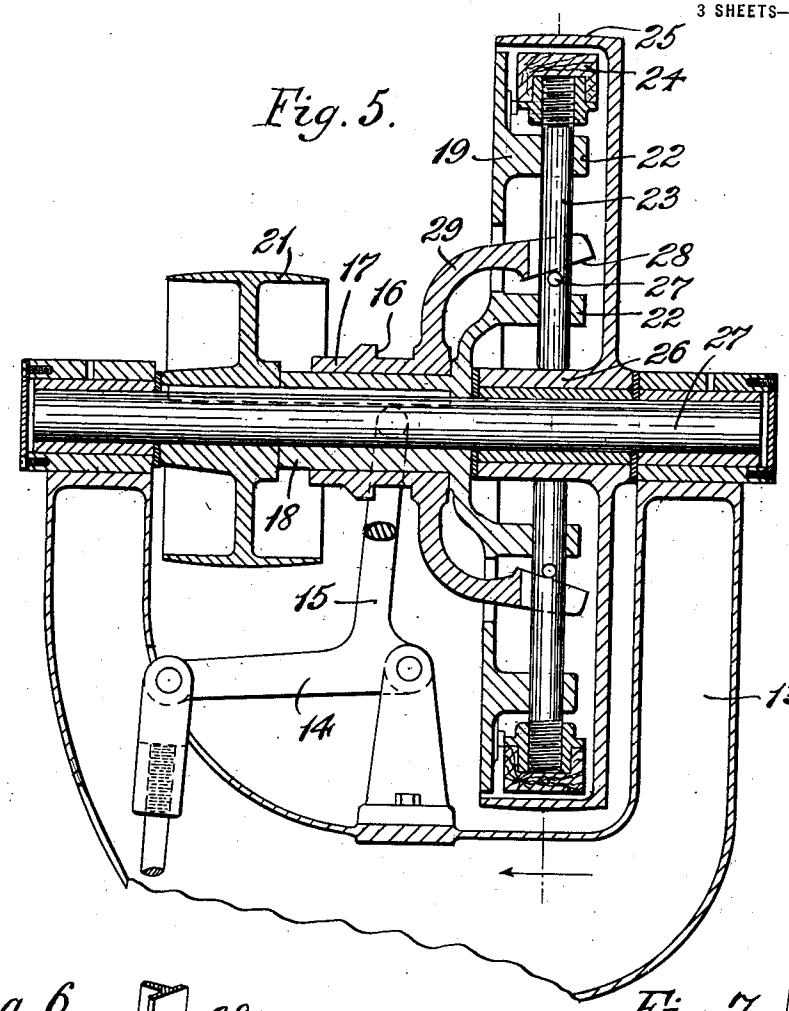


Fig. 6.

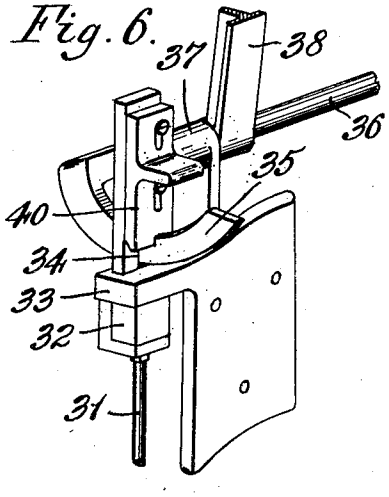
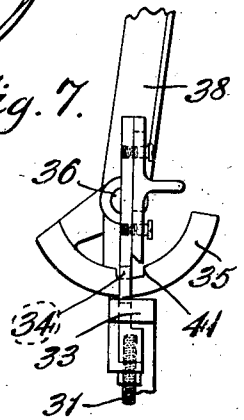


Fig. 7.



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UNITED STATES PATENT OFFICE.

SYDNEY PRESTWICH, OF CINCINNATI, OHIO, ASSIGNOR TO THE AMERICAN LAUNDRY MACHINERY COMPANY, OF CINCINNATI, OHIO, A CORPORATION OF OHIO.

CONTROL FOR EXTRACTORS.

1,392,352. Specification of Letters Patent. Patented Oct. 4, 1921.

Application filed February 8, 1917. Serial No. 147,446.

To all whom it may concern:

Be it known that I, SYDNEY PRESTWICH, citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Controls for Extractors, of which the following is a specification.

This invention relates to extractors and particularly to mechanism utilized and operated in conjunction with the foot treadle for controlling the operation of the machine by the cover.

More specifically the invention relates to mechanism utilized in conjunction with the brake and the cover of a belt driven extractor whereby, when the machine is idle the cover may only be raised when the brake is on and the brake may not be let off until the cover is closed, the power drive being controlled by the same mechanism, so that the extractor may not be started until the cover is closed and the cover can not be opened until the brake is set.

The invention may be further briefly summarized as consisting in the construction and combination of parts hereinafter set forth in the following drawings, description and claims.

Referring to the drawings, Figure 1 is a side elevation partly in section showing my device applied to an extractor; Fig. 2 is a view partly in section and partly in side elevation showing the clutch; Fig. 3 is a view upon the line 3—3, Fig. 1; Fig. 4 is a top plan view; Fig. 5 is a sectional view on the line 5—5 of Fig. 4; Fig. 6 is a detail view in perspective showing the lock; and Fig. 7 is a detail view in side elevation showing the lock with the cover raised.

In the embodiment shown in the drawings 1 represents the main frame upon which is mounted a curb 2. Within the main frame is a driver, preferably a belt pulley 3 provided with a shaft 4 carrying a basket 5 arranged within the curb. Suitable bearings are provided for the basket and its shaft. The driver or pulley 3 preferably has a brake drum 6 connected to a rotating part and adapted to be acted upon by a brake shoe 7 mounted upon a brake lever 8 extending out to the front of the machine and keyed below the brake shoe to a transverse shaft 9. The brake lever is adapted to be held down by a suitable weighted latch 10 pivoted upon the frame. Extending to the rear of and secured to the shaft 9 is a clutch operating lever 11 connected by a rod 12 passing up through a standard 13 to one arm of a bell crank lever 14, the other arm 15 of which is in the form of a fork engaging in the annular groove 16 of the clutch collar 17 which is mounted upon a hub 18 of a clutch frame 19. This hub 18 is keyed to the main driving shaft 20 mounted in suitable bearings in the standard 13, and is provided with a driving pulley 21. The main clutch frame is provided with diametrically opposed pairs of outwardly extending brackets 22 which serve to support and guide clutch shoe rods 23, the outer ends of which carry suitable clutch shoes 24 adapted to engage the inner face of the rim of the extractor driving pulley 25, which is provided with a hub 26 loose upon the shaft 20. Each of the rods 23 is provided with oppositely extending pins 27 adapted to be engaged by the inclined surfaces 28 of the fork ends of the clutch collar arms 29. There are preferably two or more rods 23 and two or more pairs of clutch collar arms with their end forks and the arrangement of the parts is such that when the clutch collar is moved to the right, as shown in Fig. 5, the inclined faces 28 move against the pins 27 and draw the clutch shoes inward thus releasing the extractor driving pulley 25 and thereby stopping the drive to this member. When the clutch collar 17 is moved to the left the inclined faces are withdrawn from the pins 27 and the clutch shoes 24 are thrown out into engagement with the extractor driving pulley 25 by centrifugal force, thus transmitting a drive to this member.

The shaft 9 is also secured to another lever or arm 30 which is in turn connected to a rod 31 extending up and secured to a latch slide 32 which is mounted in a suitable bracket 33 secured to the curb near the pivotal point of the cover. This slide is provided with an opening 34, shown in full lines in Fig. 6 and in dotted lines in Fig. 7, and adapted above the bracket to receive through it an arc shaped arm 35 secured to the cover shaft 36 mounted in suitable bearings 37 secured to the curb. Secured to this shaft 36 are cover brackets 38 carrying a suitable cover 39. Secured to the face of

the sliding block above the bracket 33 is a latch 40 slidably mounted and adapted to engage a recess 41 in the inner periphery of the arc shaped arm 35 to hold the cover elevated, as is shown in Figs. 6 and 7. The arrangement of the parts of this lock is such that when the slide 32 is down and the cover is down a solid portion of the slide is in a line with the end of the arc shaped member 35 and the cover can not be raised and this position of the slide prevails when the brake is off, the position of the brake being held off by a spring 42, shown in dotted lines in Fig. 1, and surrounding the rod 12 and engaging between a shoulder on the rod and a shoulder of the standard. This position of the brake also, as before described, shifts the bell crank lever 14 in a counter-clockwise direction, as shown in Fig. 1, thereby permitting the clutch shoes to move out and engage the extractor pulley which drives the extractor in the well known manner by means of the belt 43. The extractor is then operating and the cover can not be raised. When the operator desires to stop the extractor the lever 8 is depressed and latched putting on the brake, moving up the slide 32 to a position where its opening is in alinement with the arc shaped arm 35 and moving the bell crank lever in a clockwise direction thus causing the clutch arms 29 to draw the clutch shoes inward and break the drive through the clutch.

What I claim is:—

1. An extractor, comprising a rotatable basket, power driving means therefor, a guard cover for said basket, a lock therefor, a basket brake, operating means therefor, and means whereby operation of said operating means also directly affects said power driving means and lock.

2. An extractor, comprising a rotatable basket, power driving means therefor, a guard cover for said basket, a lock therefor, a basket brake, brake operating means, and operating connections between said brake operating means and lock and between said brake operating means and power driving means, whereby actuation of said brake controls both said cover and the application of power to the basket.

3. An extractor, comprising a rotatable basket, power driving means therefor, a guard cover for said basket, a lock therefor, a basket brake, brake operating means, and direct operating connections between said brake operating means and lock and between said brake operating means and power driving means, whereby actuation of said brake controls both said cover and the application of power to the basket.

4. An extractor, comprising a rotatable basket, power driving means therefor, a guard cover for said basket, a lock therefor, a basket brake, brake operating means, and operating connections between said brake operating means and lock and between said brake operating means and power driving means, whereby actuation of said brake releases said lock and controls the application of power to the basket.

5. An extractor, comprising a rotatable basket, power driving means therefor, a guard cover for said basket, a lock therefor, a basket brake, brake operating means, operating connections between said brake operating means and lock constructed and arranged to prevent release of the brake when the cover is open, and means whereby release of said brake effects the connection of said power driving means to said basket.

6. An extractor, comprising a rotatable basket, power driving means therefor, a guard cover for said basket, a lock therefor, a basket brake, brake operating means, operating connections between said brake operating means and lock constructed and arranged to prevent release of the brake when the cover is open, means whereby release of said brake effects the connection of said power driving means to said basket, and application of said brake disconnects said power driving means from said basket and releases said lock.

In testimony whereof I affix my signature.

SYDNEY PRESTWICH.

Witnesses:

Jos. H. Speller,

R. L. Meuzel.