

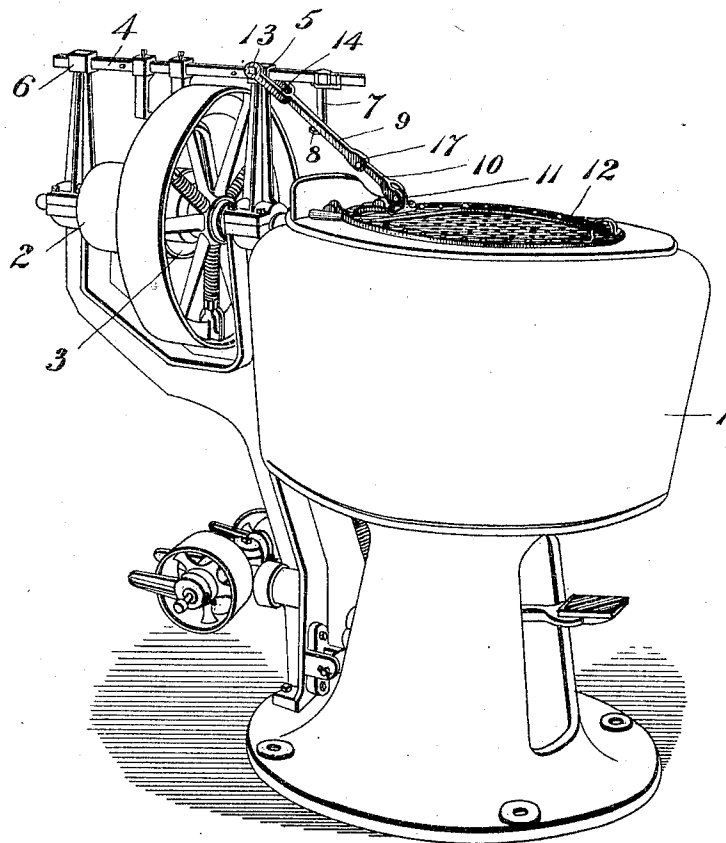
W. H. LUTES.
COVER AND LOCK THEREFOR.
APPLICATION FILED APR. 29, 1910.

1,006,245.

Patented Oct. 17, 1911.

2 SHEETS—SHEET 1.

FIG. 1.



Witnesses

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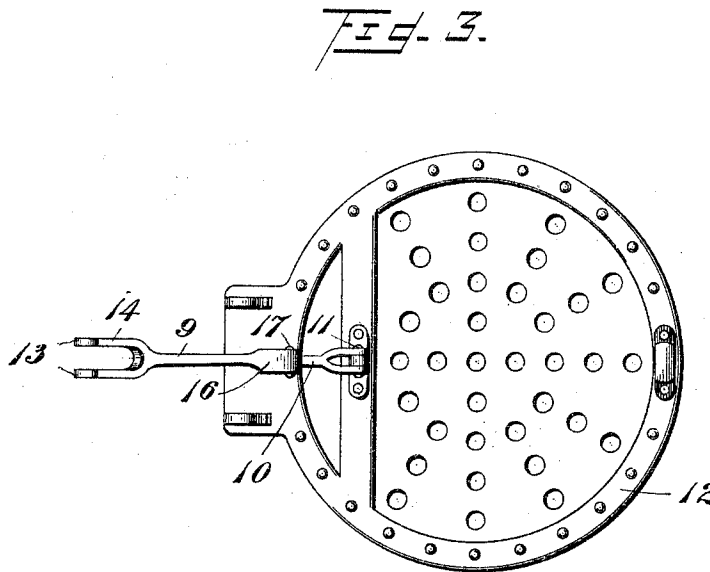
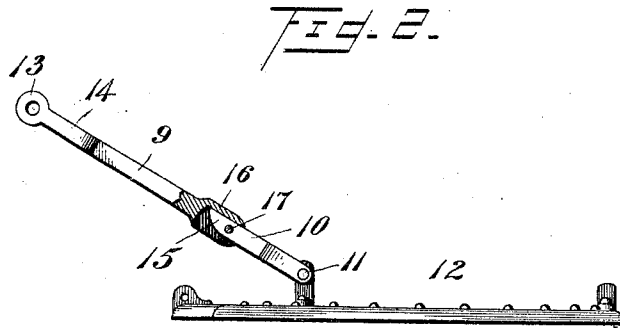
By *Edgar M. Kitchen*
his Attorney

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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

WALTER H. LUTES, OF CHICAGO, ILLINOIS.

COVER AND LOCK THEREFOR.

1,006,245.

Specification of Letters Patent.

Patented Oct. 17, 1911.

Application filed April 29, 1910. Serial No. 558,501.

To all whom it may concern:

Be it known that I, WALTER H. LUTES, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Covers and Locks Therefor; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in covers and means for holding the same rigidly in position, and has for an object the arrangement of means defining an automatic lock for positively preventing the removal of the cover until the lock has been unfastened.

Another object of the invention is the combination with a cover, an automatic lock therefor, of power shifting means formed with a member engaging the lock for positively locking the same when power is applied.

A still further object of the invention, more specifically, is the arrangement in a centrifugal extractor having means for receiving power through a belt for operating the extractor, and means for shifting the belt for applying and removing the power, of a lid for the extractor and a jointed arm designed to be engaged by a projection on the belt shifter for positively causing the arm to lock the cover in place when the belt is shifted for transmitting power to the extractor.

Another object of the invention is the arrangement in an extractor of a cover therefor and a jointed locking arm arranged to be held rigidly against unlocking when power is applied to the extractor so that the lid cannot be removed until power has been disconnected from the extractor.

With these and other objects in view, the invention comprises certain novel constructions, combinations and arrangements of parts as will be hereinafter more fully described and claimed.

In the accompanying drawings,—Figure 1 is a perspective view of a centrifugal extractor with the present invention applied thereto. Fig. 2 is a side view of the jointed arm and lid embodying certain features of the invention. Fig. 3 is a top plan view of the structure shown in Fig. 2.

In centrifugal extractors or machines for

drying clothes or the like it is desirable to provide the same with a lid and means for holding the lid or cover in position on the extractor while the extractor is in operation or moving. In the present invention means are provided for accomplishing this object arranged for locking positively the cover closed while power is applied, but permitting ready removal of the cover when power is disconnected, though not opening the extractor.

In order that the invention may be more fully understood, reference is had to the accompanying drawings in which 1 indicates a centrifugal extractor of any desired kind provided with pulleys 2 and 3, one of which is a power pulley and the other an idler. A belt shifting device 4 is provided for shifting the belt from pulley 2 to pulley 3 and again back to pulley 2 whenever desired for throwing on and off power. Belt shifter 4 is supported in brackets 5 and 6 and carries near its inner end a depending arm projection or lug 7 having a turned over portion or lateral finger 8 which extends beneath the link 9. Link 9 has a joint or extension 10 pivotally mounted at 11 to lid or cover 12. Link 9 is pivotally mounted at 13 to standard 5 and is preferably formed with a divided or U-shaped end 14 for straddling the standard 5. The extension 10 is provided with an end projection 15, if desired, which passes beneath a shoulder 16 so as to limit the upward movement of pivotal pin 17. This may be arranged in such manner so that pivotal pin 17 will not pass the dead center between pivotal pins or members 11 and 13, and consequently hold lid 12 locked as long as the lug or extension 8 is against link 9. However, if desired, 15 and 16 may be eliminated, and link 9 and extension 10 may be of such a length as to close thoroughly cover 12 before pin 17 has passed the dead center between pins or pivotal members 11 and 13. By this construction and arrangement, whenever the belt is shifted onto the power wheel for operating the extractor, lid 12 is closed and locked closed by reason of member 8 bearing against link 9. Lid 12 cannot be opened as long as the extractor is moving, though the power could be shifted from the power pulley to the idler without opening the cover. In other words, the hinged cover 12 has a jointed member or arm 9 that is held rigid when the belt shifter is drawn over

to put the power on the machine and locks the cover in place so that it cannot be opened until the belt shifter is again pushed back to carry the belt onto the loose pulley.

5 With the use of this device it is possible to stop the machine without raising the cover, but it is impossible to start the machine without first closing the cover as the movement of the belt shifter will cause
10 member 8 to press against member 9 and automatically close the cover.

What I claim is:—

1. In extracting mechanism, the combination with an extractor and means for driving
15 ing the same, of a hinged cover for the extractor, an arm pivoted independently of the extractor and pivoted to the cover, the said arm being formed with a pivotal connection intermediate its length disposed for
20 being positioned substantially in the line of the end pivots of the arm when the cover is closed.

2. In extracting mechanism, the combination with an extractor and means for driving
25 ing the same, of a hinged cover for the extractor, an arm pivoted independently of the extractor and pivoted to the cover, the said arm being formed with a pivotal connection intermediate its length disposed for being
30 positioned substantially in the line of the end pivots of the arm when the cover is closed, means for shifting the driving means into and out of operative relation, and means
35 connected with said shifting means for sustaining the arm with the alined pivots.

3. In extracting mechanism, the combination with an extractor and means for driving
40 ing the same, of a hinged cover for the extractor, an arm pivoted independently of the extractor and pivoted to the cover, the said arm being formed with a pivotal connection intermediate its length disposed for being
45 positioned substantially in the line of the end pivots of the arm when the cover is closed, means for shifting the driving means into and out of operative relation, an arm
50 extending from the shifting means, and a finger projecting laterally from the arm in position for engaging and sustaining the first-mentioned arm with its pivots substantially in alinement.

4. In extracting mechanism, the combination with a centrifugal separator and means
55 for driving the same, of a standard extending above the separator, shifting means for the driving means engaged and guided by said standard, a hinged cover for the separator,

an arm pivotally connected to the cover at one end, and at its other end pivotally connected to the standard, the said arm
60 having a pivot joint intermediate its length, and means connected to the shifting means for sustaining said arm with its several pivots substantially alined when the cover is closed.

5. In extracting mechanism, the combination with a centrifugal separator, and means
70 for driving the same, of a standard extending above the separator, shifting means for the driving means engaged and guided by said standard, a hinged cover for the separator, an arm pivotally connected to the
75 cover at one end, and at its other end bifurcated with the arms of the bifurcation extending on opposite sides of the shifting means and pivotally engaging the standard, the said arm having a pivot joint intermediate its length, and means connected to the shifting means for sustaining said arm
80 with its several pivots substantially alined when the cover is closed.

6. In extracting mechanism, the combination with a centrifugal separator, of a
85 hinged cover therefor, a standard extending above the hinge of the cover, an arm pivotally connected at one end to the cover, and extending across the hinge of the cover, said arm being pivotally connected at its other
90 end to said standard, and the arm being formed intermediate its ends with a pivotal joint adapted to be in line with the end
95 pivots of the arm when the cover is closed.

7. In extracting mechanism, the combination with a centrifugal separator, of a
95 hinged cover therefor, a standard extending above the hinge of the cover, an arm pivotally connected at one end to the cover and extending across the hinge of the cover, said
100 arm being pivotally connected at its other end to said standard, and the arm being formed intermediate its ends with a pivotal joint adapted to be in line with the end
105 pivots of the arm when the cover is closed, the said pivotal joint dividing the arm into two sections, one of which is formed with an extension, and a shoulder on the other section of the arm past which the said extension laps.

In testimony whereof I affix my signature in presence of two witnesses.

WALTER H. LUTES.

Witnesses:

CHARLES P. LYON,
C. B. HEYSER.