

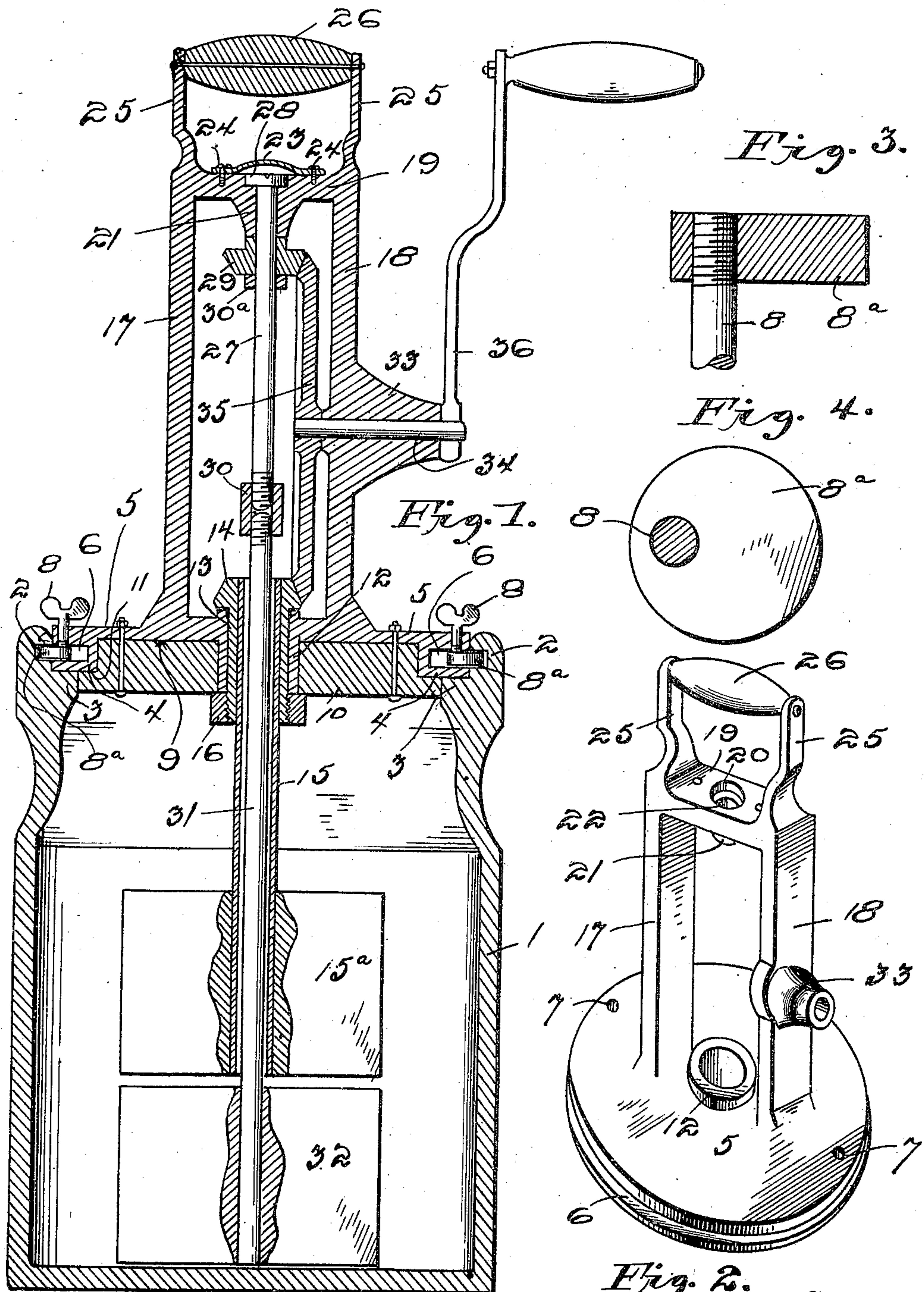
J. T. ARMSTRONG.

CHURN.

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933,948.

Patented Sept. 14, 1909.



Witnesses
W. J. Wells
H. J. Goodrich

Fig. 2. Inventor
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UNITED STATES PATENT OFFICE.

JOHN TOMIS ARMSTRONG, OF PITTSBURG, KANSAS.

CHURN.

933,948.

Specification of Letters Patent. Patented Sept. 14, 1909.

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To all whom it may concern:

Be it known that I, JOHN TOMIS ARMSTRONG, a citizen of the United States, residing at Pittsburg, in the county of Crawford and State of Kansas, have invented certain new and useful Improvements in Churns, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to churns, and has specially in view improvements in the gearing and gear-supporting and operating mechanism whereby the same may be readily taken apart for cleaning or storing purposes, and also whereby the operation of churning is greatly facilitated and the manual labor necessary greatly reduced.

15 In carrying out the objects of the invention generally stated it is contemplated employing a lid which has a novel type of detachable locking engagement with a receptacle or creaming can, said lid serving as a support for a novel frame in which the operating shaft, gearing, and gear operating mechanism are mounted.

20 It will be understood, of course, that the essential features of the invention are necessarily susceptible of structural changes and details of parts, but one preferred and practical embodiment of the same is shown in the accompanying drawings wherein—

25 Figure 1 is a central vertical sectional view of the improved churn. Fig. 2 is a detail perspective view of the lid or cover of the churn body showing the gear frame thereon. Fig. 3 is a detail perspective view of the improved latch for locking the lid or cover to the body. Fig. 4 is a plan view of the same.

30 Referring to said drawings by numerals 1 designates the body or receptacle which may be of any desired or convenient shape, and having the inner edge of its top portion provided with an annular locking recess 2. Said inner portion of the receptacle 1 is also provided with an annular inwardly projecting flange or shoulder 3 located a slight distance below the recess 2 and which forms a seat for the flange 4 of the lid or cover 5. Said lid or cover 5 is provided with a peripheral recess 6 which is intersected by oppositely disposed openings 7 for thumb-bolts 8 which project into said recess 6 and carry on their projected ends a cam or eccentric 8^a which, when said bolts are turned in one direction enter the recess of the receptacle 1 so as to

lock said lid or cover thereon. Said lid or cover 5 is preferably of metal and in order to prevent the contents of the receptacle coming in contact with the same it is provided with a central recessed portion 9 forming a seat for a block of wood, or like material 10 which is provided with an annular peripheral flange 11 which extends under the flange 4 and has a snug fit against the side of the body 1. Said block 10 may be bolted or otherwise rigidly, but detachably connected to said lid or cover.

60 The lid or cover 5 is provided with a central tubular extension 12 which projects through the block 10 and also projects a slight distance above the lid or cover, and through which a sleeve 13 extends the lower portion of which is threaded and whose upper end is provided with a beveled gear wheel 14, said gear wheel resting upon the upper portion of said tubular extension. A hollow shaft 15 projects through said sleeve 13 and into the receptacle 1 and has a dasher rigidly mounted on its lower end. A nut 16 coöperates with the threaded end of sleeve 13 to hold the same in binding engagement with the hollow shaft 15 so that when gear 14 is rotated, the hollow shaft will be similarly actuated.

75 Two spaced apart standards 17 and 18 are vertically arranged on the lid or cover 5, one being disposed on each side of the central opening or tubular extension thereof, said standards being connected adjacent to their upper ends by means of the horizontal member 19 provided with a central recess 20 and pendent thickened portion 21 which has an opening 22 formed through it which communicates with said recess. A cap 23 spans said recess and is detachably held in such position by means of the screws or bolts 24. The ends of said standards may be reduced in thickness, as indicated at 25 and are connected by means of a handle or hand grip 26.

80 A shaft 27 projects through the opening 22 of the horizontal member 19 and has a head 28 seated in the recess 20. Said shaft carries a bevel gear 29 the hub of which abuts the lower end of the pendent portion 21 of the member 19, said gear being held in such position by means of a nut 30. Said shaft projects between said standards 17 and 18 and has its lower end threaded for the reception of a coupling sleeve 30 which also

connects with another shaft 31 projecting through the hollow shaft 15 and having its lower end equipped with a dasher 32.

The standard 18 is provided with a laterally projecting bearing 33 through which a shaft 34 projects. The inner end of said shaft is equipped with a master gear 35 which is in mesh with the gears 14 and 29. The outer end of said shaft is provided with a handle 36 whereby said gear 35 may be rotated to impart an opposite turning movement to said gears 14 and 29 and thereby rotate the shafts 31 and 15 to cause their respective dashers to operate in different directions, and thereby quicken the churning, as will be readily apparent.

Preferably the lid or cover and the standards are integral and the same may be readily cast, thus materially cheapening their cost.

It will be seen from the foregoing that the shafts 27 and 31 may be readily disconnected so that the lid or cover with its gearing and shaft 27 may be removed from the body, after which the other shaft 31 may be removed from the receptacle, thus permitting all parts of the machine to be thoroughly cleaned.

What I claim as my invention is:—

1. A churn comprising a body provided with an annular locking recess adjacent its upper end, a lid or cover fitting said body

and provided with a recessed periphery, bolts extending through said lid or cover and into said recessed periphery, and an eccentric carried by each bolt and adapted to be turned to enter the recess of said body, to lock said lid or cover thereon.

2. A churn comprising a body, a cover therefor, spaced apart standards carried by said cover, a connecting member for the upper portion of said standards, the upper ends of said standards being reduced and projecting above said connecting member, a hand grip journaled in said reduced ends, dasher operating mechanism carried by said standard, and dashers operated by said mechanism.

3. A churn comprising a body, a lid or cover therefor, standards carried by said lid or cover, a connecting member for the upper portion of said standards having a central pendent portion provided with a central vertical opening and an end recess, a dasher operating shaft having its head in said recess and extending through said opening and into the said body, dashers carried by said shaft, and means for operating said shaft.

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

JOHN TOMIS ARMSTRONG.

Witnesses:

DON W. SHELTON,
GEO. WEISBROD.