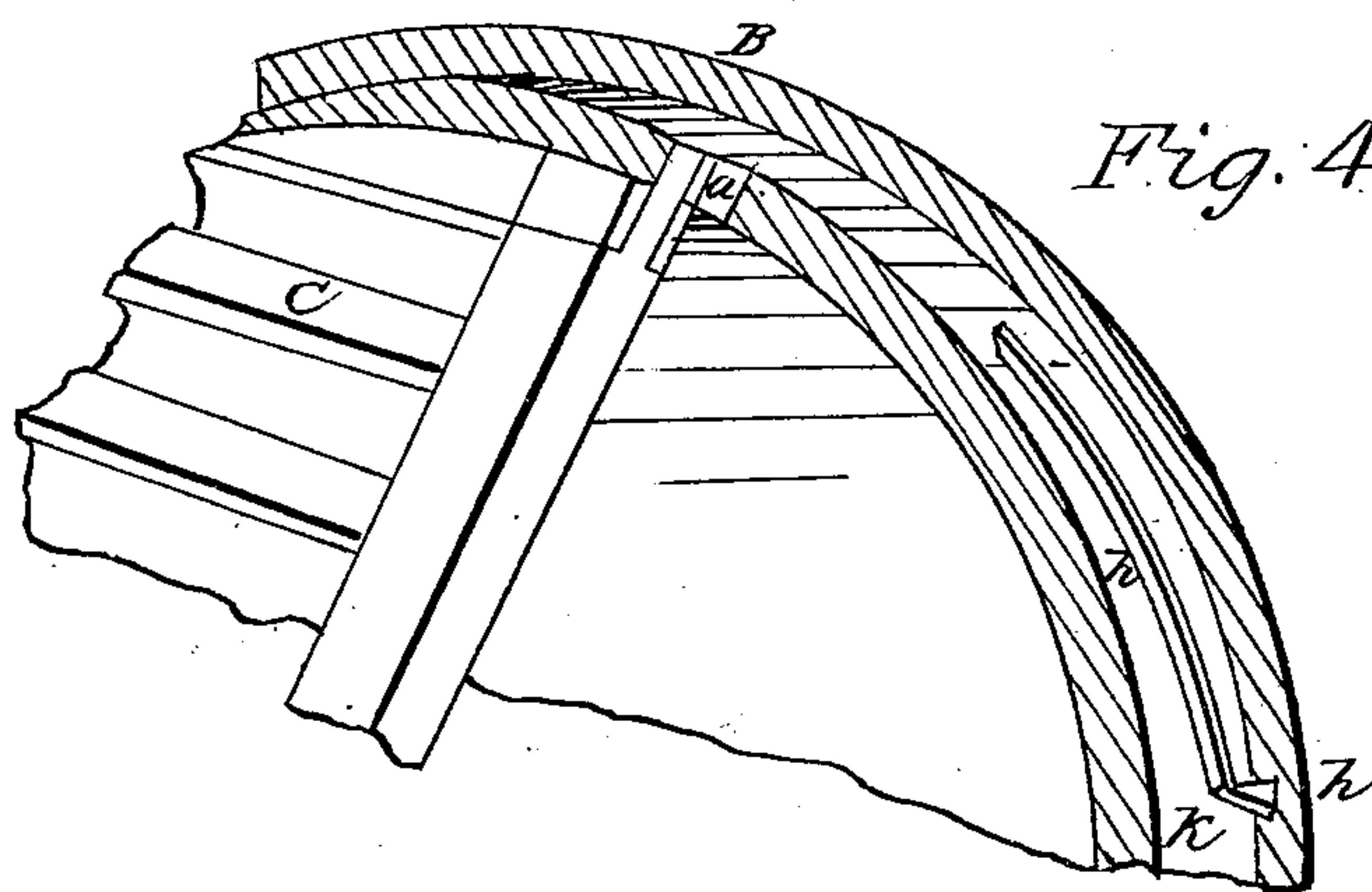
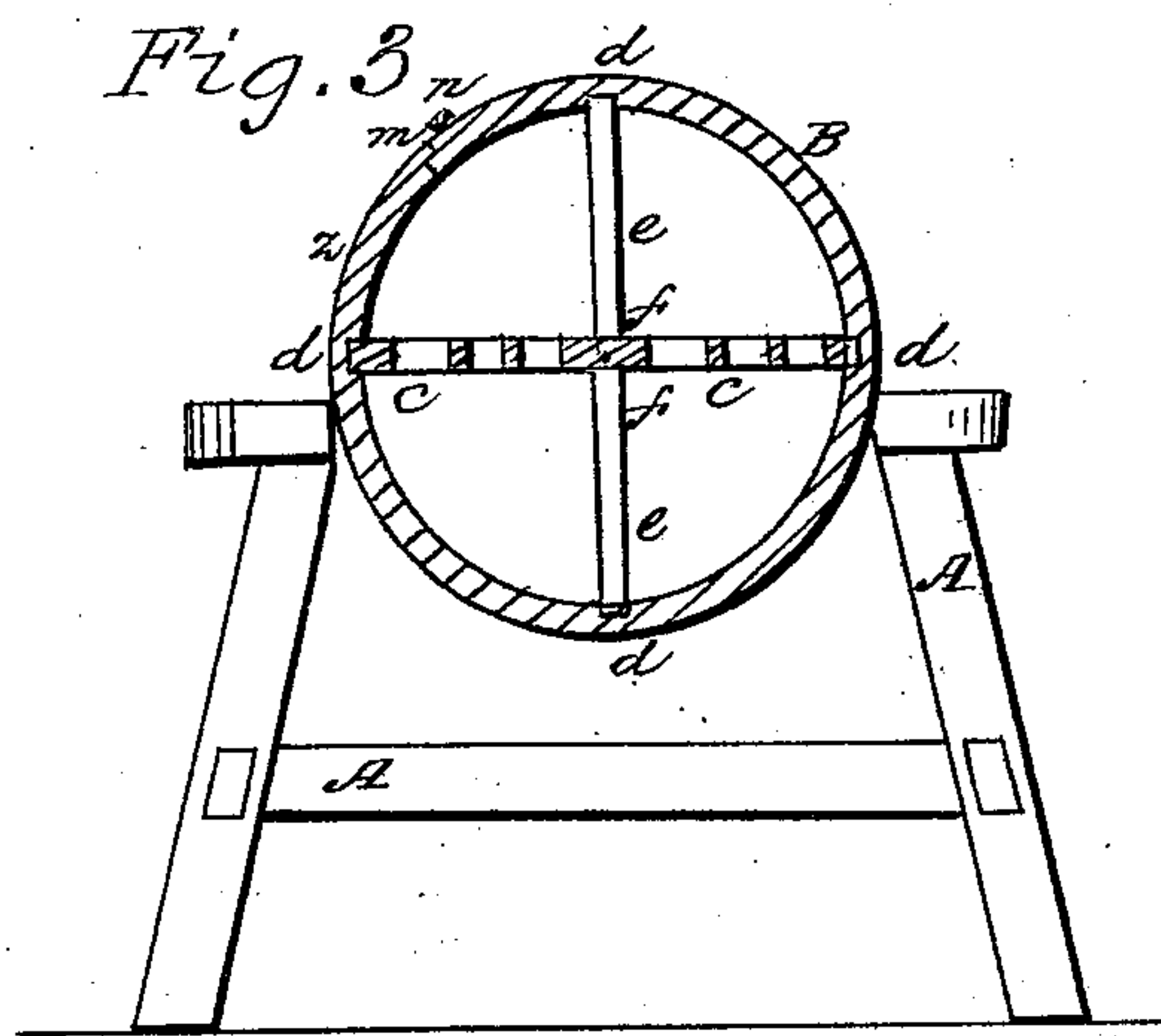
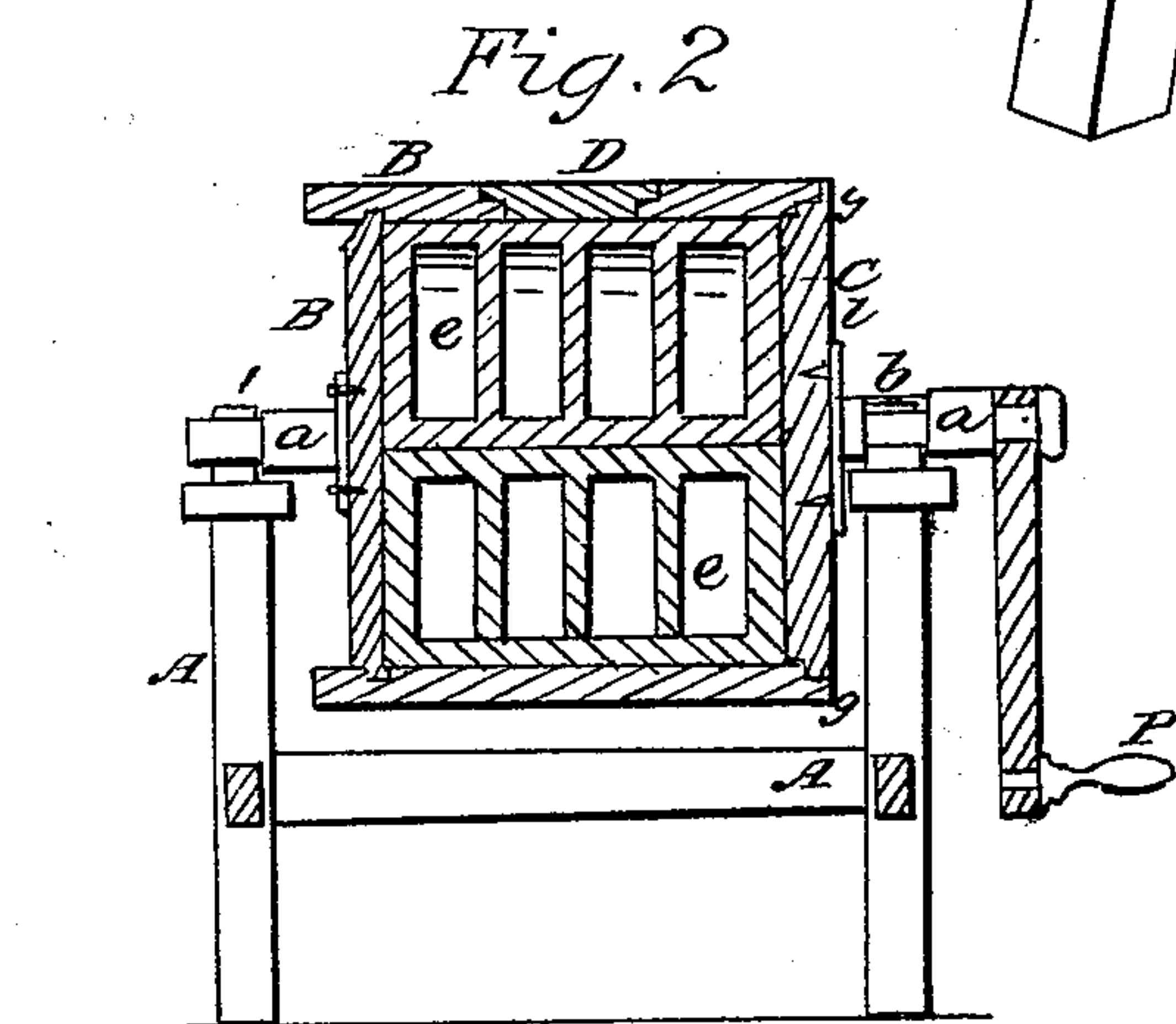
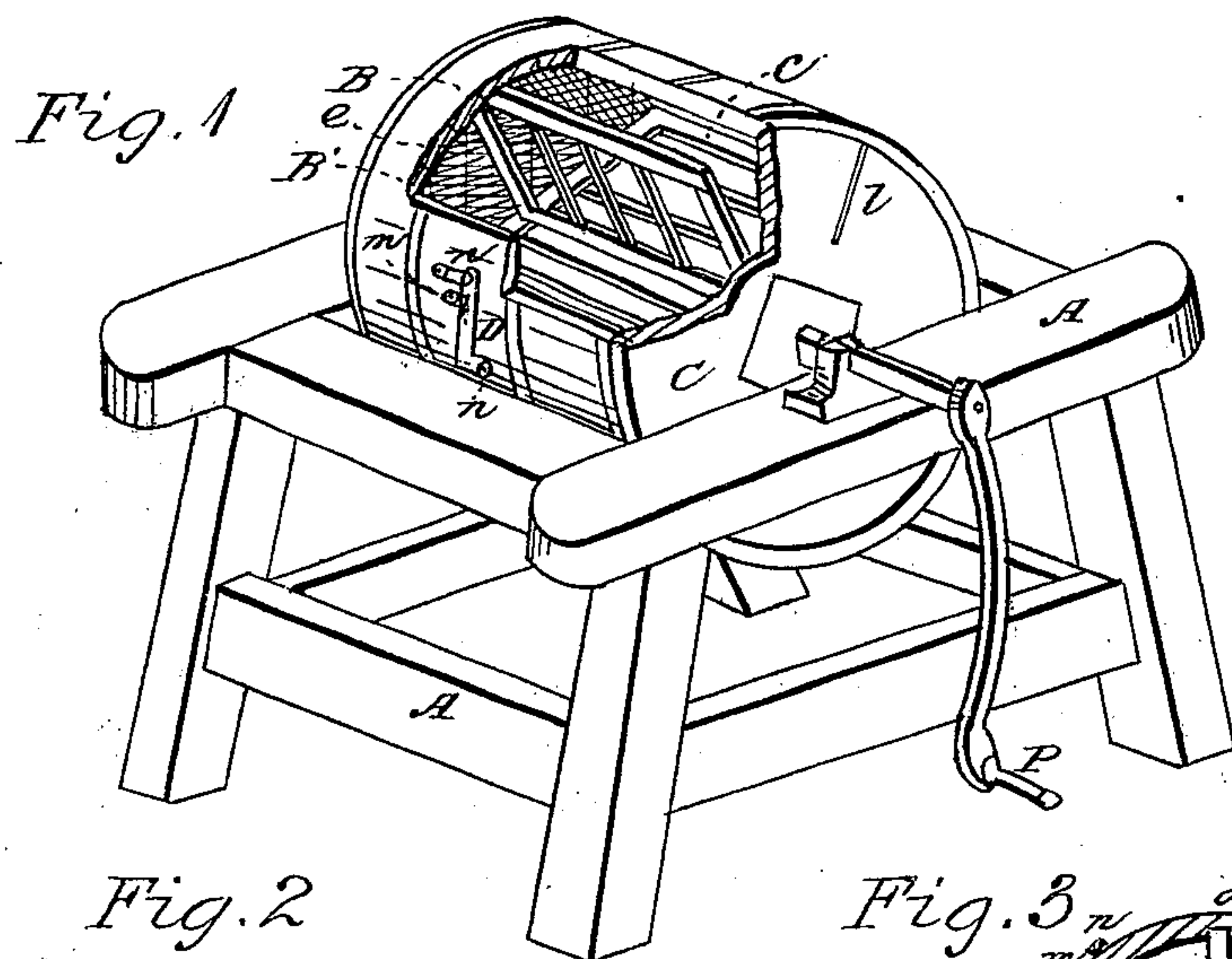


WEGNER & SCHLEETER.

## Churn.

No. 99,985.

Patented Feb. 15, 1870.



Witnesses:

Alex Selkirk  
Charles Selkirk

Inventors

Friedrich Wegner  
Charles Schaefer



# United States Patent Office.

FRIEDRICH WEGNER AND CHARLES SCHLEETER, OF WEST TROY, NEW YORK.

Letters Patent No. 99,985, dated February 15, 1870.

## IMPROVEMENT IN CHURNS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, FRIEDRICH WEGNER and CHARLES SCHLEETER, of West Troy, county of Albany, State of New York, have invented certain new and useful Improvements in Churns; and we do hereby declare that the following is a specification thereof.

The nature of our invention consists in the use of a drum or cylinder supported by a suitable frame-work and provided with suitable journals or shafts on which the said drum is to revolve.

The said drum is provided on the inside with bars or slats fixed stationary within, some of the said bars are placed longitudinally while others are placed laterally.

One end or head of the said drum is fixed while the other end or head is detachable, and is secured in its place by means of pins fixed in the said head, working into inclined grooves or slots made in the inner side of the said drum, near its end.

A suitable door or entrance is provided on a side of the drum into which the milk or cream is passed. The said door is secured in place by means of a pivoted bar working into catches attached to the drum.

A suitable crank is also provided by which the drum may be revolved.

One part of our invention relates to arranging inside of a revolving drum two sets of slats or bars, one set of which runs longitudinally and the other laterally, both of which are fixed stationary within and revolve with the same.

These slats are made in frames, and work in grooves made in the inside of the drum, and can be removed when desired.

A part of our invention relates to the manner of securing the detachable head in its place in the drum, and consists in the employment of pins fixed in the edge of the said head and working into inclined slots or grooves made in the drum inside near its end.

In the drawings—

Figure 1 represents a perspective view of the invention.

Figure 2 is a longitudinal vertical section of the same.

Figure 3 is a lateral vertical section.

Figure 4 is a perspective view of a section, enlarged, of the drum and frame of slats of drum, with a portion of the bars or slats within the same; also the inclined groove for holding the head.

In the drawings—

A represents any suitable frame-work which supports the drum B, by means of the shafts *a a'* working into suitable bearings *b b*.

The drum B is constructed of wood, and is provided with one set of slats or bars, *c*, figs. 1, 2, 3, and 4, which run longitudinally inside, and another set of bars, *e*, which run from the centre to the sides.

The said slats *c* and *e* are made in frames, which frames are secured in their places in the inside of the drum by being slipped into the grooves *d* made in the inside of the drum, as shown in figs. 3 and 4, while they are held at the center of the drum by suitable pins, *f*, attached to one set of frames and working in the other.

The drum has one of its heads, *B'*, fixed while the other head, *C*, is made detachable.

The said head *C* is provided with pins, *g*, fig. 2, which work into inclined grooves, *h*, shown in perspective view in fig. 4, made in the recess *k* of the said drum.

A short groove, *k'*, leads from the face of the recess to the said inclined groove *h*, by which the pins *g* are admitted to the said inclined groove *h*.

When the head *C* is placed in position at the end of the drum B with the pins *g* entering the groove *k'* and inclined grooves *h*, the said head is turned partially round, when the inclined grooves *h* will cause the head *C* to draw tightly in its recess *k* and against the shoulder of the same.

Any suitable packing, such as rubber or its equivalent, may be used to make the connection between the drum and the head *C* water-tight.

A spring-catch, *l* is also provided and secured to the head *C*, figs. 1 and 2, which catches in the notch made in the drum and prevents the head *C* from being accidentally turned round or loosened up.

An entrance is made in a side of the drum, which entrance is closed by a suitable door or cover, *D*, suitably packed to prevent leaking.

The said cover or door *D* is secured in its place by means of the bar *m* pivoted to the said cover and working under the catches *n n*, fig. 1.

To operate with this invention, the several frames or bars *c* and *e* are slipped in their places, the drum being previously removed from its frame A, or grooves *d*, when the head *C* is placed in the recess *k*, in such a manner as will cause the pins *g* to fall into their respective grooves *k'* and *h*, when the said head is partially turned round until the spring-catch *l* falls into its place, and the whole is locked.

The drum B is then placed in its frame with its shaft *a a'* falling into its bearing.

The cover *D* is then removed by pushing the pivoted bar *m* to one side, so as to be freed from its catches *n n*, when the milk or cream may be poured into the drum.

When the desired quantity of cream to be operated upon has been poured in, the cover D is put in place, and the bar *m* is operated in reverse and the cover secured.

The operator then revolves the drum by means of the crank *p*, figs. 1 and 2, and in revolving the said drum the milk or cream inside is partially carried up and dashed against the bars *c* and *e*, while at the same time the said bars *c* and *e* cut through the cream, thereby greatly agitating the same and breaking the globules and freeing the butter from the cream.

The revolutions of the drum are continued until all the butter has been gathered from the milk or cream, when the drum can be removed from its frame and

the head C removed and the butter taken from the vessel.

Having described our invention,

What we claim, and desire to secure by Letters Patent, is—

The combination of the revolving drum B, slats *c* and *e*, detachable head C, recess *k*, pins *g*, grooves *h* *h'*, spring-catch *l*, constructed and arranged substantially as described for the purpose set forth.

FRIEDRICH WEGNER.  
CHARLES SCHLEETER.

Witnesses:

ALEX. SELKIRK,  
CHARLES SELKIRK.