

(No Model.)

W. W. HINMAN.
CHURN.

No. 504,385.

Patented Sept. 5, 1893.

FIG. 1.

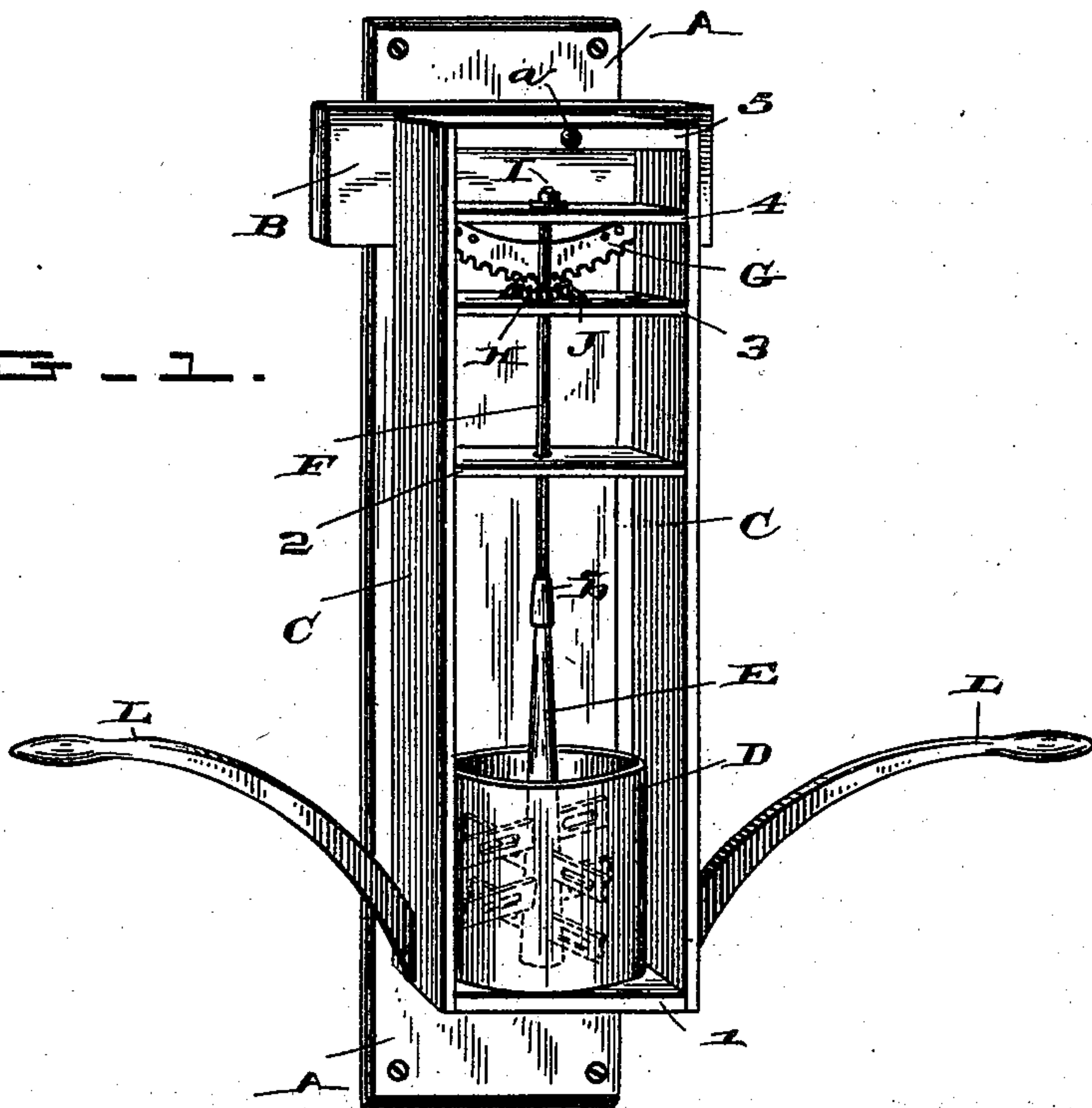


FIG. 2.

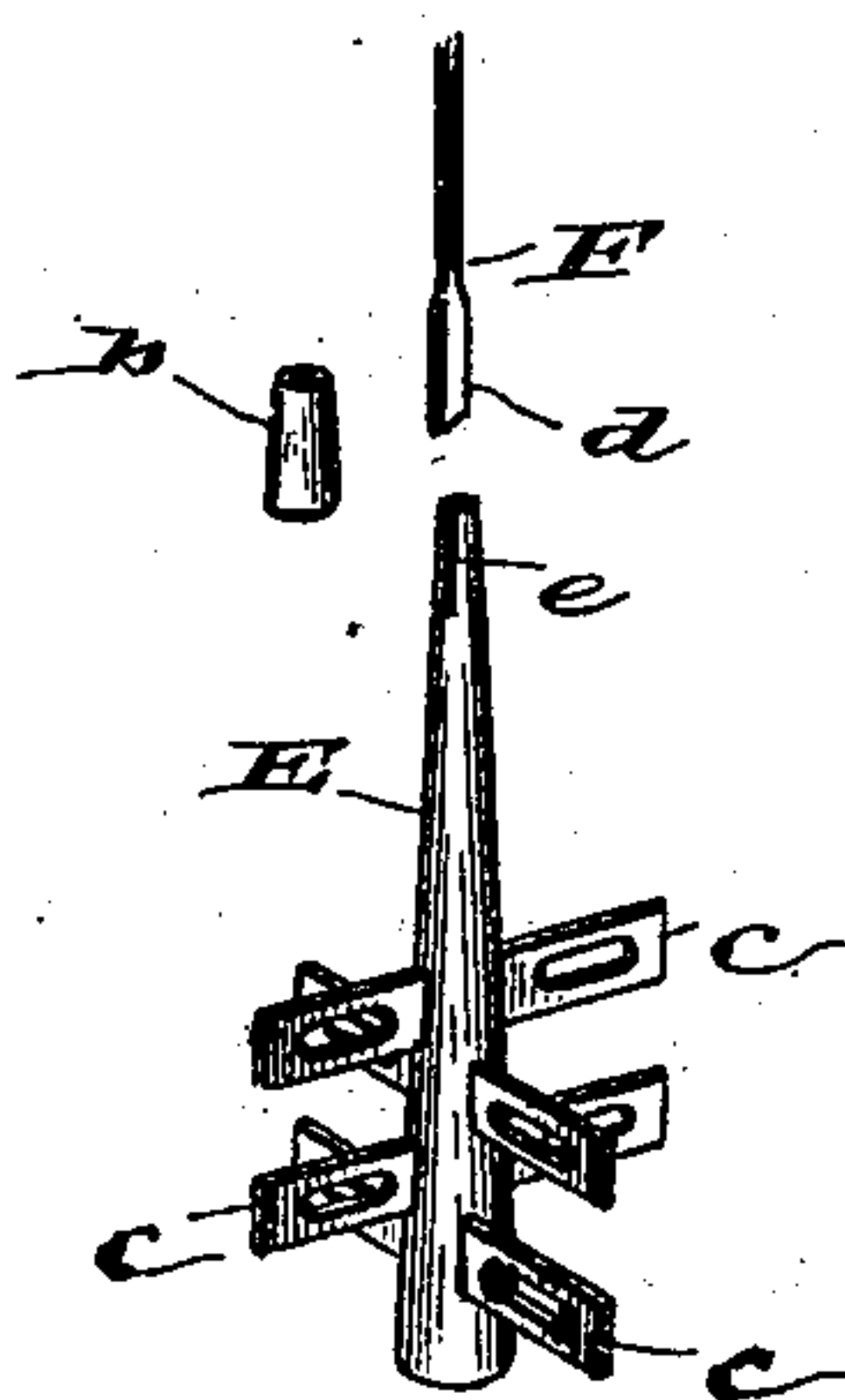


FIG. 3.

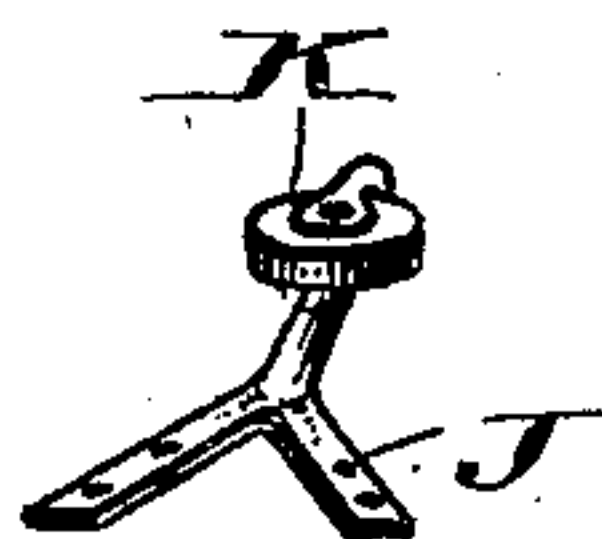
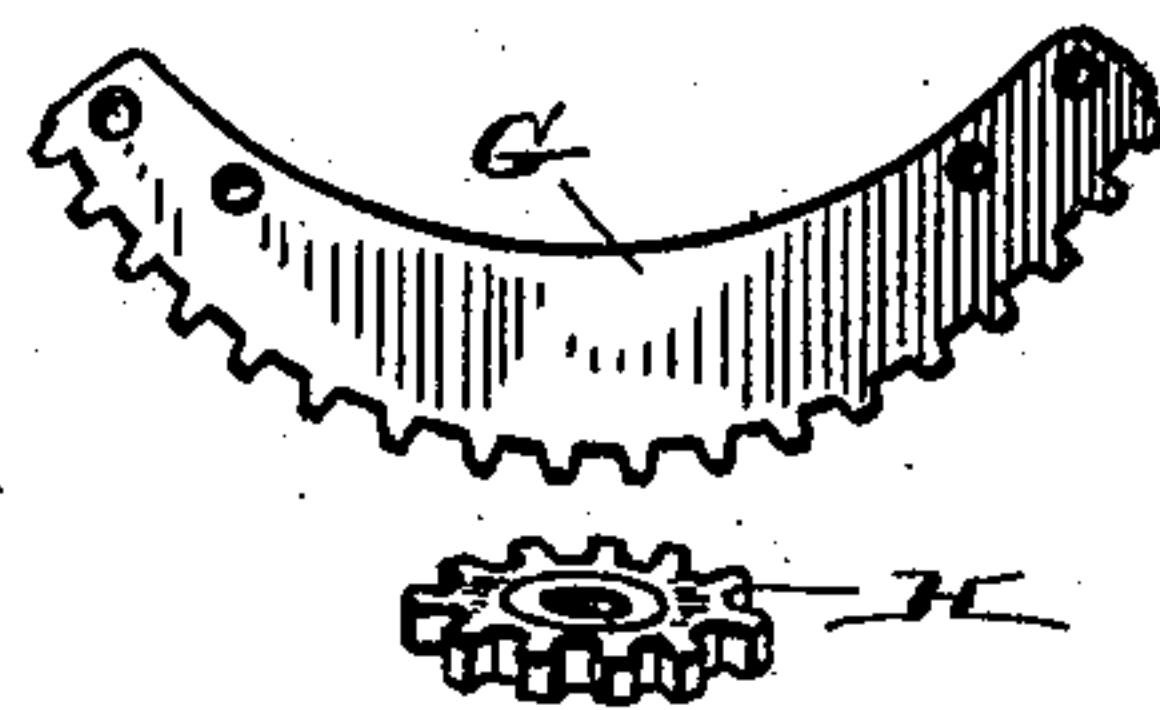


FIG. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM W. HINMAN, OF ELKHART, ILLINOIS.

CHURN.

SPECIFICATION forming part of Letters Patent No. 504,385, dated September 5, 1893.

Application filed May 26, 1893. Serial No. 475,401. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. HINMAN, a citizen of the United States, residing at Elkhart, county of Logan, State of Illinois, have
5 invented a certain new and useful Improvement in Churns, of which the following is a specification.

This invention relates to improvements in churns and has for its object to combine simplicity, durability and practical utility. I attain this object by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the combination as adjusted for use. Fig. 2 is the
15 oscillating shaft, pedal shaft and thimble for connection; Fig. 3, the bracket and guard-wheel. Fig. 4 is the ratchet and ratchet-wheel.

Similar letters and numerals of reference
20 indicate corresponding parts.

In Fig. 1, A. A. represent the back board which is fastened to the wall by means of screws.

B is a bracket cross-piece attached to A. A. near the top and of sufficient thickness to permit the frame to swing clearly (shown in Fig. 1).

C. C. is a frame having cross bars 1, 2, 3, 4 and 5. This frame is swung to board A. A. by bolt *a* passing through cross-bar 5 and cross piece or bracket B and upon which it is permitted to swing as shown in Fig. 1.

D is a cream jar which rests on cross-piece 1.

E is the pedal shaft passing into the cream
35 jar and with pedals attached.

F. is the oscillating shaft which operates pedal-shaft and is connected therewith at *b* by thimble.

G. is a ratchet having its lower face cogged,
40 is of one-third circle and is attached to bracket cross-piece B. by screws. The oscillating shaft F passes through cross-bar 2 which acts as guard—through ratchet-wheel H. on cross-bar 3, and through cross-bar 4 where it is secured by nut I as shown in Fig. 1. Ratchet-wheel H is attached to oscillating bar and

works by means of cogs on ratchet G. when frame C is moved back and forth.

Attached to cross-bar 4 on either side of ratchet-wheel H, is a V-shaped bracket J. terminating just back of and beneath the ratchet
50 opposite ratchet wheel and to which is attached a small guard-wheel K which runs against back of ratchet and keeps same in gear as shown in Fig. 3.

L. L are handles attached to lower part of frame C. C. and by which it is operated.

c. c. c. are the pedals which may consist of any number of pairs and consist of flat pedals with oblong holes in their centers substantially as illustrated, and are so constructed that when the frame is swung back and forth the action of the oscillating bar revolves them so rapidly first in one direction, then the opposite that the cream is soon turned into butter
65 and gathered to the center around pedal-shaft where it is found intact when done. The oscillating bar having lower end *d*, flat, as shown in Fig. 2 fits in a slot *e*, in top of pedal-bar as shown in Fig. 2. They are then fastened by
70 bringing thimble *b* which fits top of pedal-bar E, down over them and which presses them together substantially as illustrated and described.

Having thus described my invention, what
75 I claim as new, and desire to secure by Letters Patent, is—

A churn, comprising a back-board, a bracket secured thereto, a frame pivoted to the bracket and having its sides connected by a series of
80 cross-bars, a segmental rack-bar arranged in the upper portion of the frame, a shaft carrying a pinion in mesh with the rack-bar, a pedal-bar connected with the shaft, and a bracket carrying a roller adapted to bear
85 against the rack-bar to keep it in mesh with the pinion.

WILLIAM W. HINMAN.

Witnesses:

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