(No Model.)

C. W. PATTON.

CHURN POWER.

No. 314,875. Patented Mar. 31, 1885.

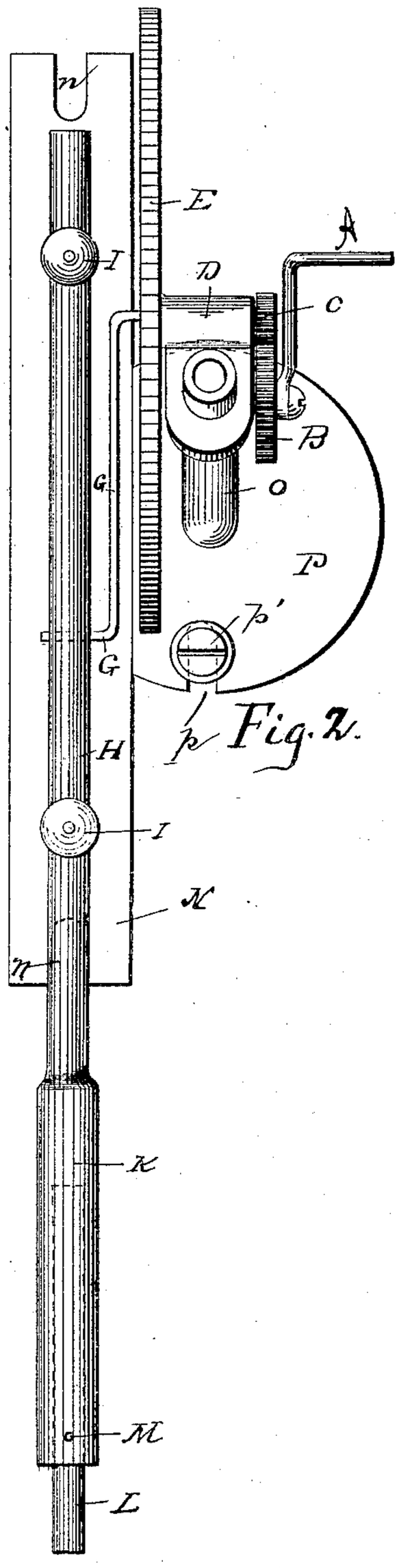

Fig. 2.

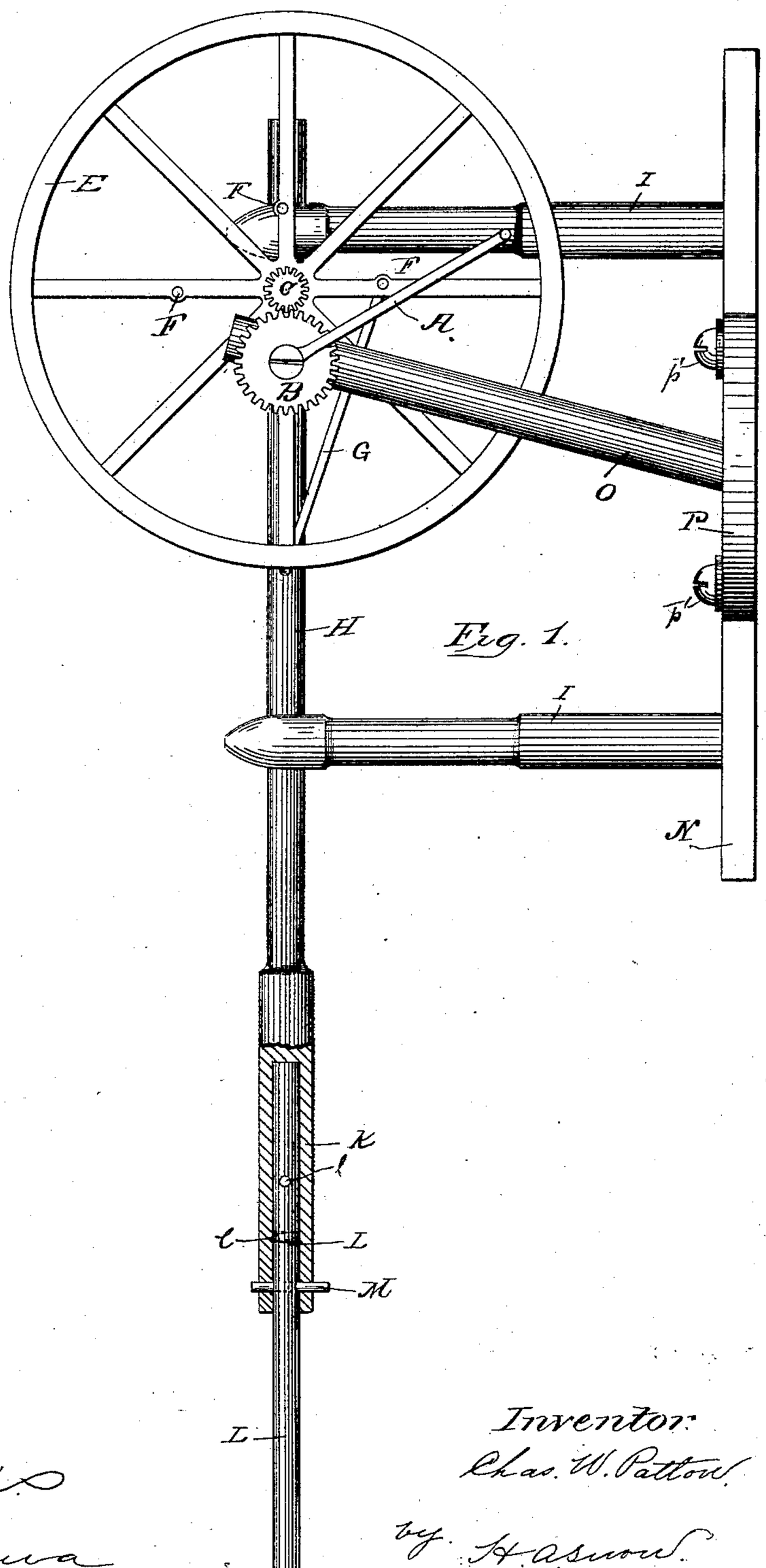

Fig. 1.

Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES W. PATTON, OF HOUSTON, TEXAS.

CHURN-POWER.

SPECIFICATION forming part of Letters Patent No. 314,875, dated March 31, 1885.

Application filed June 3, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. PATTON, a citizen of the United States, residing at Houston, in the county of Harris and State of Texas, have invented certain new and useful Improvements in Churn-Powers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in churn-powers; and it consists of a plunger-shaft so connected to a wheel by means of a loose rod as to alternately raise or lower said shaft as the wheel rotates.

The object of the invention is to accomplish the up-and-down motion and consequent agitation without the usual amount of labor. I accomplish these objects by means of the mechanism shown in the accompanying drawings, in which—

Figure 1 is a side elevation of my invention, partly in section. Fig. 2 is a front elevation of the same.

In the drawings, A is a handle attached firmly to the cog-wheel B, the cogs of which engage the cogs of the smaller cog-wheel C. These cog-wheels B and C are journaled in the block D, the former, as before stated, being firmly attached to the crank-handle A and the latter to the fly-wheel E, as shown in drawings. In a perforation of the spoke of said wheel is inserted the rod G loosely. This rod is attached to the shaft H in the same manner as to the spokes of the wheel. Several perforations (marked F on the drawings) are provided in the spokes or arms of the wheel E, in order that the link G may be inserted in one or the other, as may be desired, and changed from one to the other as the holes F become worn. The shaft H is held in sockets in the end of brackets I I, and provided at its lower end with the hollow portion K to receive the plunger L and hold the same, which it does by means of pin M passing through corresponding holes in the hollow portion and plunger, as shown. There are several holes, *l*, in the rod L, so as to adjust it to any height shaft, H. This adjustment, together with that afforded by the open-ended slots in the boards N and P, renders it possible to make the action of the parts entirely smooth and even. The plunger is provided with a suitable dasher. The frame-work consists of the brackets I I, attached to the board N, which is secured to the wall by any suitable means, and the bracket O, supporting the journal-block D, secured to wall or partition by the piece P, placed close to the board N, so as to make an easy adjustment between the fly-wheel E and shaft H.

The operation of my invention is as follows: The handle A being turned, the fly-wheel E is turned by means of the interlocking cog-wheels B and C, and the fly-wheel turning gives the reciprocating motion to the shaft H and by it to the plunger L, which, being provided with a dasher, churns the cream. The brackets I I, it will be observed, are placed one above and the other below the connection between the link G and shaft H, whereby the shaft is kept in an upright position, and its movement is always in a right line vertically, so that the plunger L and consequently the dasher which is attached to it have a steady, even movement, and no strain or jar comes upon the churn-body.

The plate P, to which the support O is attached, is movable up and down by means of the open slots *p*, in which the bolts *p'* are engaged. The same construction is maintained in the board N, as shown at *n*, so that the two attaching means N and P are adjustable with respect to each other in order to properly bring the connection between the link G and shaft H into place, if the length of connecting-piece G should be such as to throw the dasher too far down or too far up. The open-ended slots also permit the easy removal and replacement of the parts, as only one bolt or screw need be removed and the boards simply slipped out from under the other. This also insures that the supports will be put back in the same place or height, so that the churn will be worked properly without much adjustment being required.

Having described my invention, what I claim is—

A churn-operating mechanism consisting of the adjustable board P, having open-ended

slots, as described, bracket O upon said board, and the crank and wheels supported by said bracket, the board N, having the brackets I I, and being provided with open-ended slots for adjusting it up and down, a shaft, H, working in brackets I I, and link G, connecting shaft H to one of the wheels, said shaft H having a hollow lower end, and the churn-dasher handle L, provided with the openings *l* at various heights, and pin M for connecting parts H and L, as set forth.

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

CHARLES W. PATTON.

Witnesses:
D. S. GALLAGHER,
P. F. HARDCASTLE.