I. M. WEST.

Churn.

No. 48,469.

Patented June 27, 1865.

Fig. 2

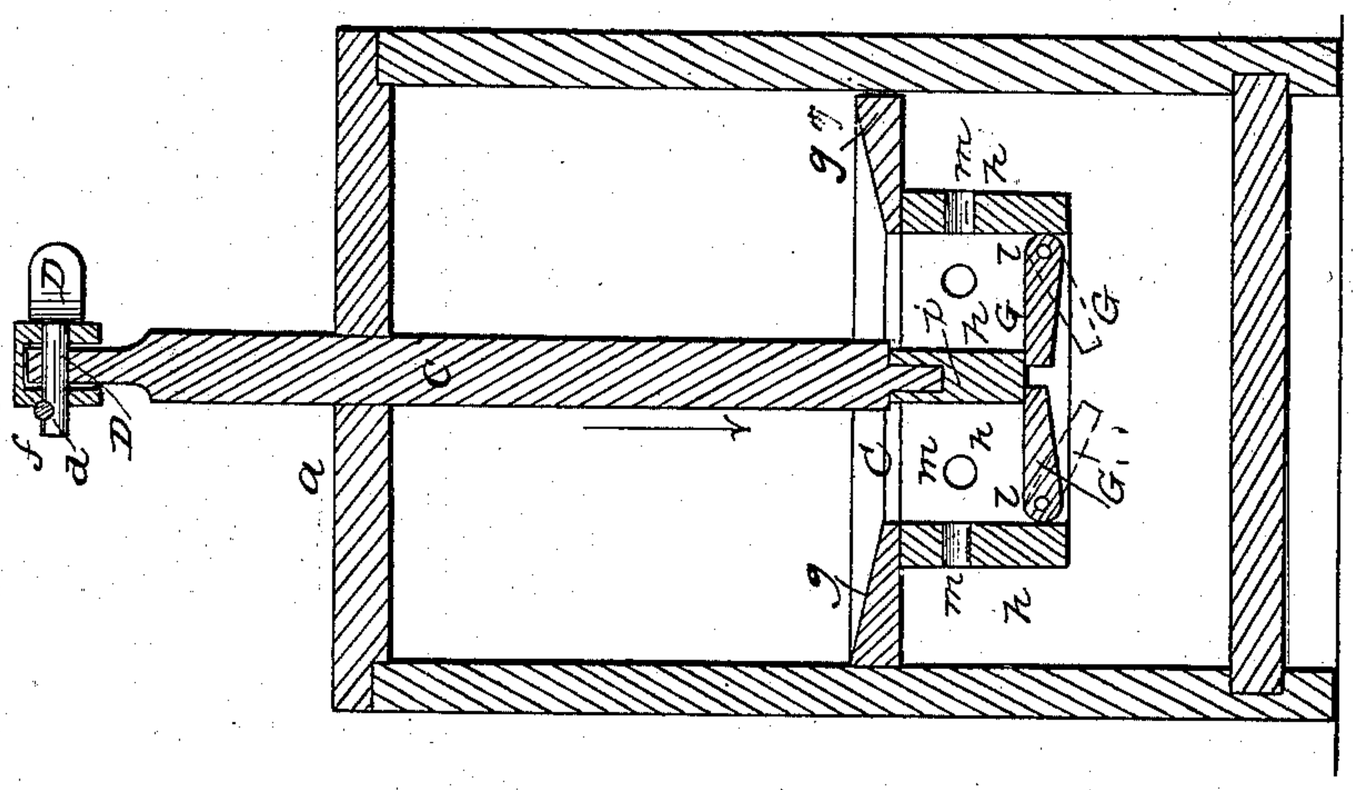


Fig. 3

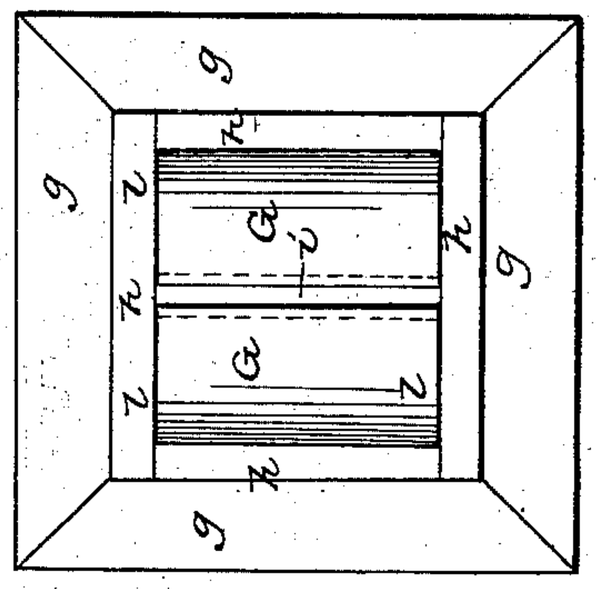
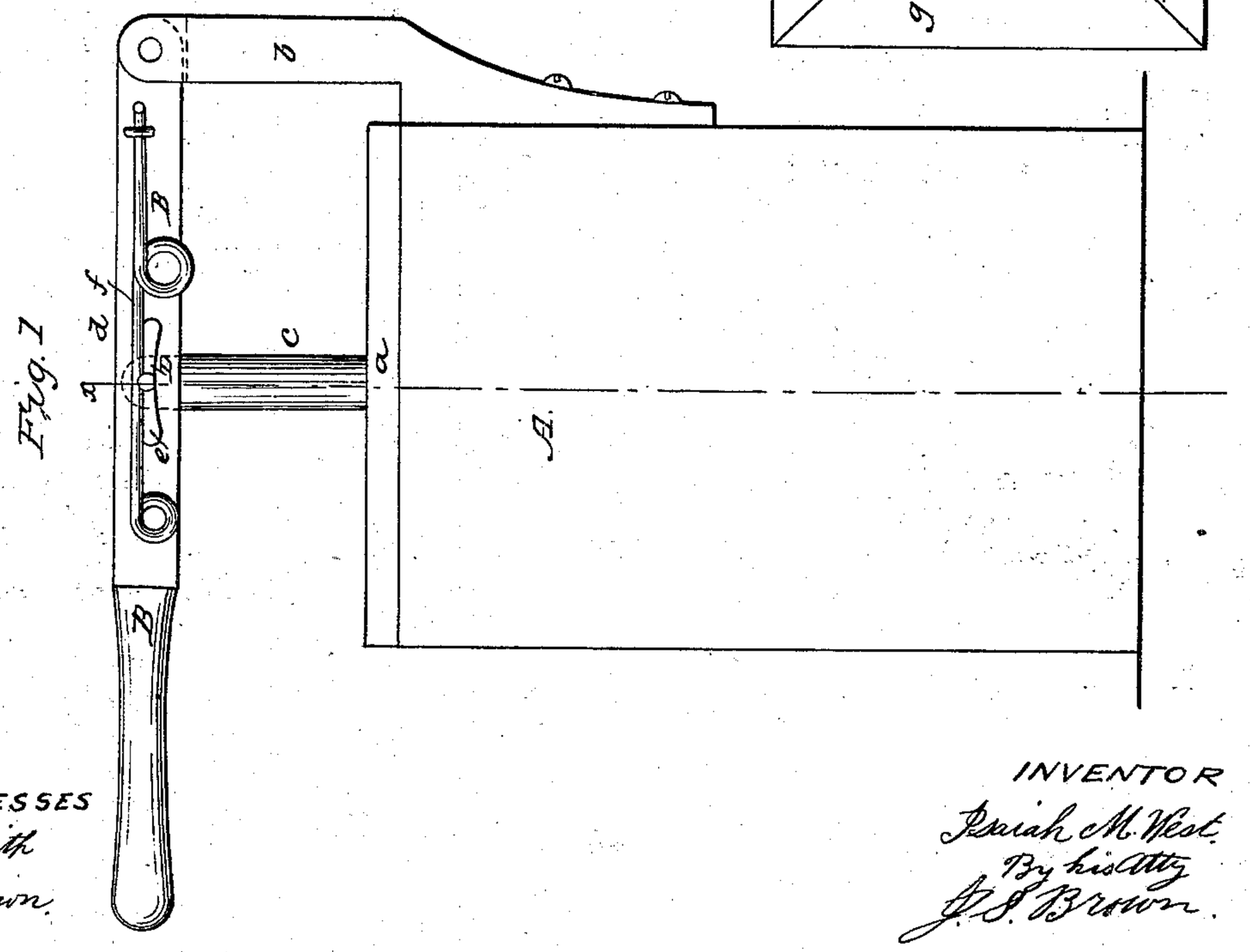


Fig. 1



WITNESSES
E. A. Smith
E. J. Brown.

INVENTOR
Josiah M. West.
By his Atty
E. S. Brown.

UNITED STATES PATENT OFFICE.

ISAIAH M. WEST, OF WILMINGTON, OHIO.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. **48,469,** dated June 27, 1865.

To all whom it may concern:

Be it known that I, ISAIAH M. WEST, of Wilmington, in the county of Clinton and State of Ohio, have invented new and useful Improvements in Churns; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a side elevation of a churn provided with my improvements; Fig. 2, a vertical section thereof, in a plane indicated by the line *x x*, Fig. 1; Fig. 3, a bottom view of the churn-dasher.

Like letters designate corresponding parts in all of the figures.

Let A represent the body of the churn, which may be a square box, as shown, with a closely-fitting cover, *a*. On one side is secured a standard, *b*, Fig. 1, extending upward a proper distance to pivot an operating-lever, B, to it.

My first improvement consists in a convenient means for connecting the dasher-rod *c* with the lever B, so as to allow the rod always to work freely in a straight line in the center of the churn, and to enable the rod and lever to be quickly and easily disconnected, when desired, for gaining admission to the inside of the churn. This device is composed of a notched pin, D, passing through a long curved slot, *e*, in the lever, and a hole in the dasher-rod, and of a spring-catch, *f*, resting in the notch *d* of the pin D. The slot *e* allows the pin D and dasher-rod *c* to play laterally, so as to keep the rod centrally in the hole through the cover *a* of the churn-body. The spring-catch *f* and notch *d* in the pin hold the pin securely in place, while the spring-catch can be lifted in an instant from the notch and the pin withdrawn from the lever and rod, when the lever is ready to be detached from the rod, and to be swung back out of the way, and the cover *a* can be drawn off from the rod. The whole are just as readily replaced again.

My second improvement consists in an improved dasher, C. It is composed of a central box, about half filling the transverse space of the churn-body, having vertical sides *h h h h*, a rim, *g*, at the top, reaching close out to the sides of the churn-body, and having its bottom closed by two swinging lids, G G, all substantially as shown in Figs. 2 and 3. The lids G G swing and open downward, as indicated by dotted lines in Fig. 2, and close tightly upward against a central partition or support, *i*, to which the dasher-rod *c* is attached. The vertical sides *h h* of the dasher are perforated with holes *m m m*, as shown in Fig. 2. As the dasher moves up and down the rim *g* closes the space of the churn-body, thereby forcing the cream to pass through the dasher itself. In ascending its bottom lids open downward and allow a portion of the cream to flow through, the currents thereof crossing and intermingling, so as to produce increased agitation of the cream, and this passage, together with the holes *m m m* in the vertical sides *h h h h* of the dasher, enables the dasher to be raised more easily than it descends—an effect which is to be desired, because lifting the dasher is more wearisome labor than forcing it down, the weight of the dasher impeding the one but assisting the other movement. In the descent of the dasher all, or nearly all, of the cream is forced in through the holes *m m m* of the dasher sides. These contracted passages operate effectually on the cream, and the direction of the streams being horizontal there is no splashing up and leaking of the cream at the top of the churn.

I disclaim the use of hinged wings or lids applied to churn-dashers, such having been before employed; but

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the notched pin D in the lever-slot *e* and dasher-rod *c* with the spring-catch *f*, for the purposes herein specified.

2. The construction of the dasher C, with its vertical perforated sides *h h*, close rim *g*, and close swinging lids G G, substantially as and for the purpose herein set forth.

The above specification of my improved churn signed by me this 7th day of January, 1865.

ISAIAH M. WEST.

Witnesses:
J. H. WEST,
L. D. REED.