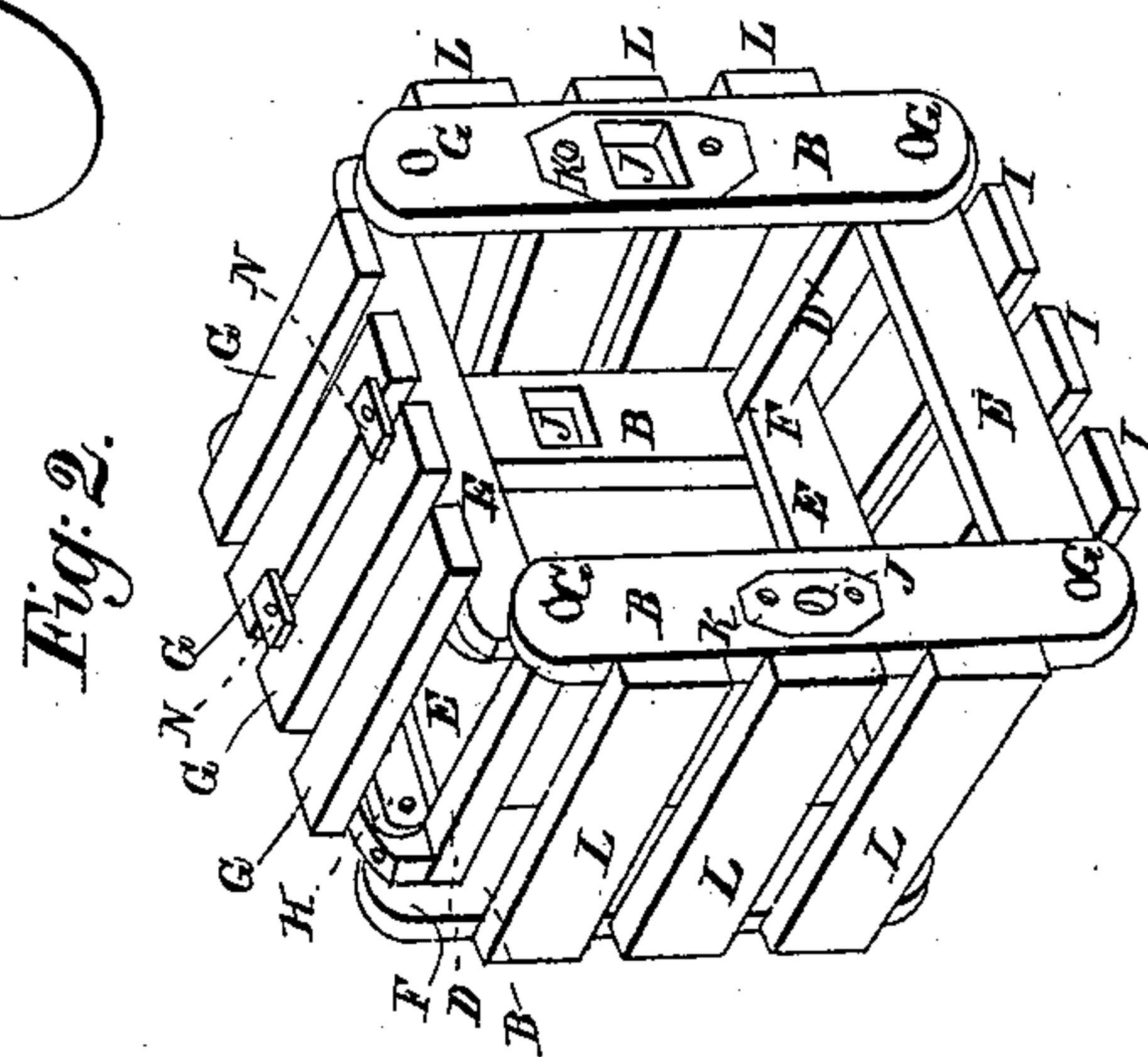
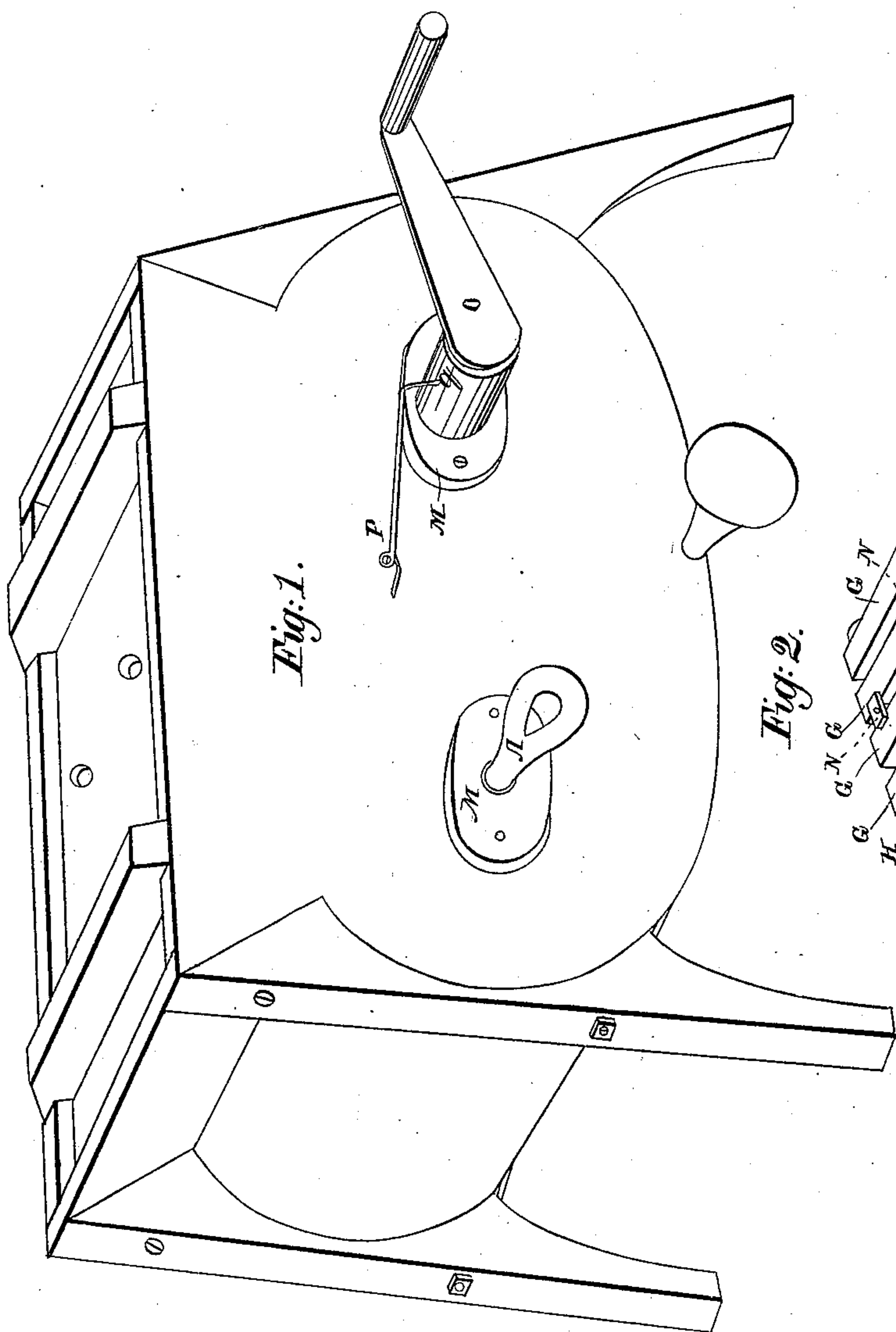


E. B. CLEMENT.

Churn.

No. 12,377.

Patented Feb. 13, 1855.



UNITED STATES PATENT OFFICE.

EDWIN B. CLEMENT, OF BARNET, VERMONT.

CHURN.

Specification of Letters Patent No. 12,377, dated February 13, 1855.

To all whom it may concern:

Be it known that I, EDWIN B. CLEMENT, of Barnet, in the county of Caledonia and State of Vermont, have invented a new and
5 useful Improvement in Churns; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference made thereon.

10 The nature of my invention consists in so constructing the dasher that when it is in operation, it will surround the cream and force it through spaces between the slats of the dasher by closing or folding together.

15 To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The shape of my vessel, see Figure 1, of the accompanying drawings, for holding the
20 cream is described by the extremities of the dasher when being moved to the right and left until it is folded together, making the vessel a little larger each way so the dasher will not come in contact with it. The sides
25 of the vessel are perpendicular, the ends being circular to where the sides of the mouth of the vessel begin to flare out. A cover with two or more airholes, is fitted to the mouth of the vessel.

30 A better understanding of the shape and form of the body of my churn will be gained by the description of the dasher as represented by Fig. 2. I use four pieces of wood for arms, see letters B, B, B, B, exactly of
35 a length and size. Near each end of each of these arms I bore a hole, see letters C, C, C, C, which holes are sufficiently large to receive the journals of the shafts D, D, and not swell and become tight when wet. There
40 are four of these shafts, the length of each being equal and a little less than the width of the vessel, with a journal or bearing on each end of each. Two of these shafts are not seen in the drawings. I also use four
45 connecting bars of equal length, see letters E, E, E, E, the ends of which bars are made fast at the shoulders of the journals of the shafts D D, see letters F, F. The under side of the two bottom connecting bars, I

make a little rounding corresponding with 50 the bottom of the vessel.

The top of the dasher is a double door or lid, made of slats see letters G, G, G, G, one half inch thick, by one and one half or two inches wide, or any size necessary. 55 These slats are made fast to wooden arms, which operate as hinges, one end of each, see letter H, others not seen, being connected by a screw or pin on which to turn on the inside of the connecting bars 60 near the shafts D, D. These doors or lids are secured in their place while churning, by two buttons see letters N, N. I fasten slats like those represented by letters G, G, G, G, on the under side of the bottom con- 65 necting bars see letters I, I, I, and on the outside edges of the arms B, B, B, B, see letters L L L L L L leaving spaces of suitable width between them for the cream to pass through. In the center of two of the 70 arms B, B, is a square hole, and in the other two a round one see letters J, J, J, one of the round holes not seen. A piece of metal with a corresponding hole, is embedded in one side of each of these arms see letters 75 K, K, the opposite sides not seen.

The crank O, see Fig. 1, the shaft of which is square with the exception of the bearings on each end, is made to fit the square holes in the arms of the dasher, the 80 bearings resting in the boxes in each side of the vessel, see Fig. 1, letters M, M, the others not seen, and kept in its place by the spring P, one end of which passes through the box M, see letter Q and into a groove 85 cut in the bearing of the crank shaft. A round rod with a looped end see letter R, is put through the other box and through the round holes in the arms of the dasher. I cut a thread in one of these boxes, and a 90 corresponding one on the rod, and this rod is screwed in and keeps its place. By working the crank forward and back it will open and fold the dasher, and describe the inside of the vessel.

I come now to the operation. Place the dasher into the vessel, with the arms of the dasher standing perpendicular. Secure the

doors or lids down by the buttons. Put in
the rod and crank, with the handle of the
crank up. Put in the cream and steadily
move the crank forward and back. After
5 the butter becomes separated from the milk,
put all the butter into the dasher, draw off
the butter milk, and put in a sufficient quan-
tity of pure cold water, and operate as in
churning and the butter will be completely
10 washed and ready for the salt.

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

The folding dasher operating as described
and set forth.

EDWIN B. CLEMENT.

Witnesses:

X. C. STEVENS,

H. H. JOHNSTON.