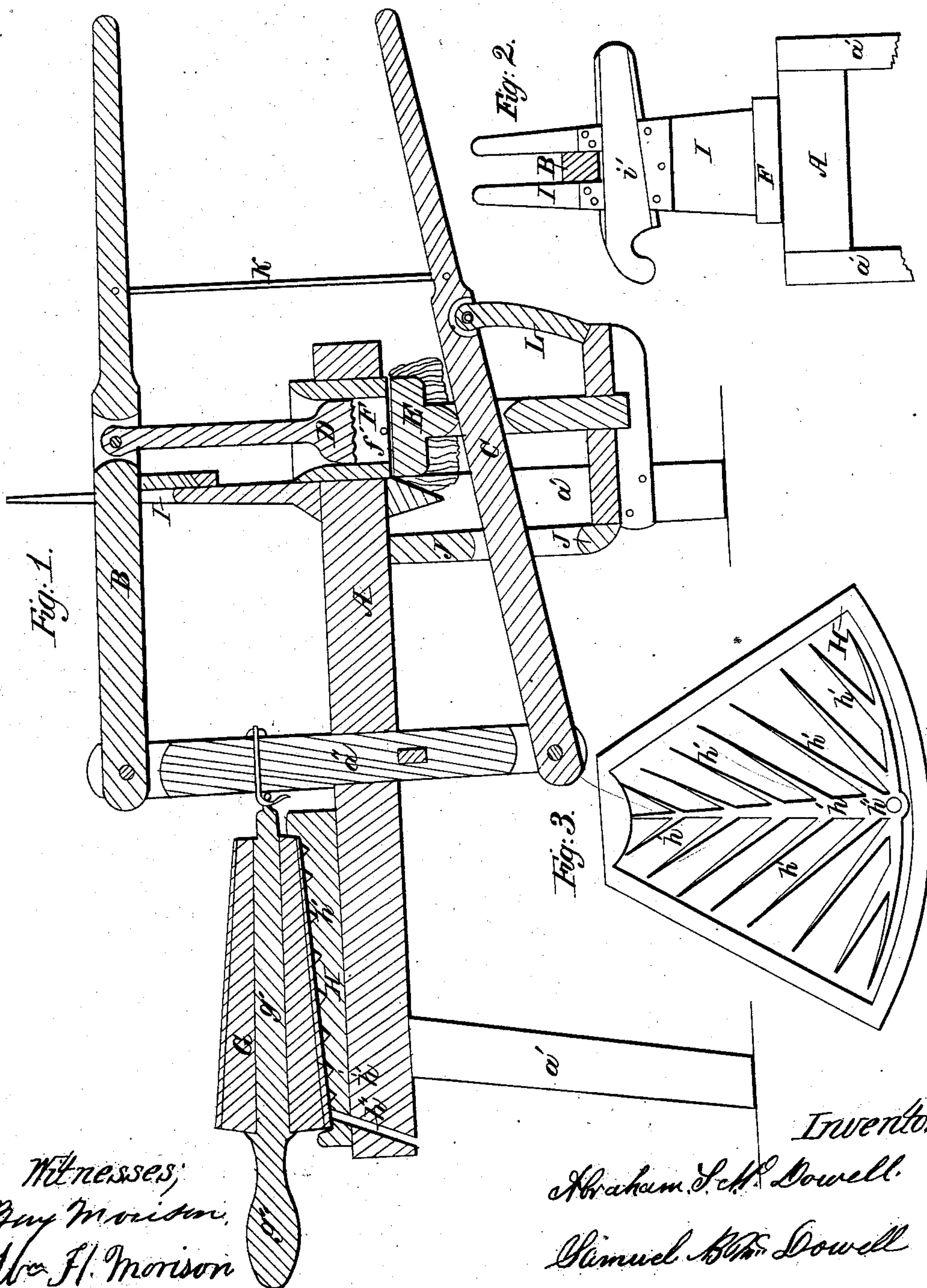


A. S. & S. B. McDOWELL.

Butter Mold.

No. 69,923.

Patented Oct. 15, 1867.



Witnesses;  
Ray Morison,  
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# United States Patent Office.

ABRAHAM S. McDOWELL, OF PHILADELPHIA, AND SAMUEL B. McDOWELL,  
OF MONTGOMERY COUNTY, PENNSYLVANIA.

*Letters Patent No. 69,923, dated October 15, 1867.*

## IMPROVEMENT IN BUTTER-WORKING AND PRINTING MACHINE.

*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, ABRAHAM S. McDOWELL, of the city of Philadelphia, in the State of Pennsylvania, and SAMUEL B. McDOWELL, of the county of Montgomery, and State aforesaid, have invented a new and useful Improvement in the Butter-Working and Printing Machine; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical longitudinal section of the said improved machine.

Figure 2, a sectional representation of the upper portion of the front end; and

Figure 3 a plane view of the tray detached.

Like letters of reference indicate the same parts when in the different figures.

The object of our improvement is to afford a more easily-constructed and simply-operating machine for working and printing butter; and our invention consists in the construction and arrangement of certain parts of the machine, as hereinafter described and specified.

#### *Construction.*

Referring to the drawings, A is a strong wooden plank, or stand, supported horizontally upon suitable legs *a' a'*, and having fixed vertically through its middle a post, *a''*, the upper and lower ends of which latter serve respectively as points of attachment for two hand-levers B and C, whereby the piston printer D, and the adjustable bottom E of the mould F are operated; and also as a fixed point of attachment for one end of the axis *g'* of a fluted conical roller G, so that the latter, which turns freely around its axis, can be rolled, by means of its axis, right and left alternately, in a sector-shaped tray H, which is grooved and perforated, as shown in fig. 3. Near the front end of the stand-plank A the mould F is fixed permanently in a vertical position. It is open at top and bottom. (See fig. 1.) The piston D, (the bottom of which serves as the printer,) is jointed to the upper lever B, and the adjustable bottom E of the mould F is attached by its stem to the lower lever C, so as to be operated in relation to the mould F as hereinafter described, the levers being guided by suitable respective uprights, I and J. The upright guide I is more clearly shown in fig. 2. It has a horizontally adjustable tapering slide, *i'*, which serves to stop the descent of the lever B at any particular point at which the said slide may be adjusted for the purpose, as will be hereinafter described. The lever C has a swinging prop, *c'*, whereby the said lever can be quickly caused to support the bottom E of the mould F closely up against the said mould, as shown in fig. 1. K is a swinging wire hook, whereby the two levers B and C can be coupled together as occasion may require.

#### *Operation.*

The butter to be printed is first "worked" on the tray H, by pressing and rolling the roller G from side to side over it in the tray, by means of its axial handle *g''*, until the buttermilk has been worked out, the latter running along in the grooves *h' h'* of the tray, and out through the drain-hole *h''*. The bottom E of the mould F is now covered by a butter-cloth, and secured, by means of the prop *c'*, close up against the mould F, as represented in fig. 1. The lever B is then raised, and thus the piston D withdrawn. One pound of the worked and salted butter is now weighed out and placed in the mould F, the piston D then inserted, and the butter pressed firmly down within the mould, thus condensing and printing it. The slide *i'* is then pushed in until its upper edge comes into close contact with the lower edge of the lever B, and there secured so as to remain as a stop for the said lever in the subsequent printing operation. The swinging wire hook K is now applied so as to connect the two levers B and C together, as shown in fig. 1, the prop *c'* and the slide *i'* then withdrawn, and the levers pressed downward by hand, thus forcing the printed pound of butter out in connection with the descending bottom E, and from which latter it can then be readily removed with the cloth. The rest of the worked and salted butter is then printed in the same manner, except that the weighing is dispensed with, because the slide *i'*, being re-inserted, will stop the further descent of the piston D as soon as the lump of butter put into the mould is reduced by the pressure of the piston to the size required to leave it a pound in weight—a little in excess of a pound being always put into the mould, and the excess exuding through a small

exit-hole,  $f'$ , in the said mould. The object of the swinging wire hook K is to prevent the bottom E of the mould from falling when the prop  $c'$  is withdrawn, and to compel it to descend with the print of butter in an easy and steady manner; and the object of the cloth is to prevent the butter printed from sticking to the bottom E.

This is a very simply-operating, inexpensively constructed, and effective machine for working and printing butter.

What we claim as our invention, and desire to secure by Letters Patent, is confined to the following, viz:

1. We claim the construction and arrangement of the mould F, the adjustable bottom E, the piston printer D, the levers B and C, the prop L, the swinging hook K, and the supporting-stand A; the same operating together substantially as and for the purpose described.
2. In combination with a butter-printing apparatus, constructed and operated as described, we claim the fluted roller G, turning loosely upon its axis  $g'$ , which is jointed to the post  $a''$  as described, and the sector-shaped tray H, grooved and perforated as described; the same operating together as and for the purpose described.

ABRAHAM S. McDOWELL,  
SAMUEL B. McDOWELL.

Witnesses:

BENJ. MORISON,  
WM. H. MORISON.