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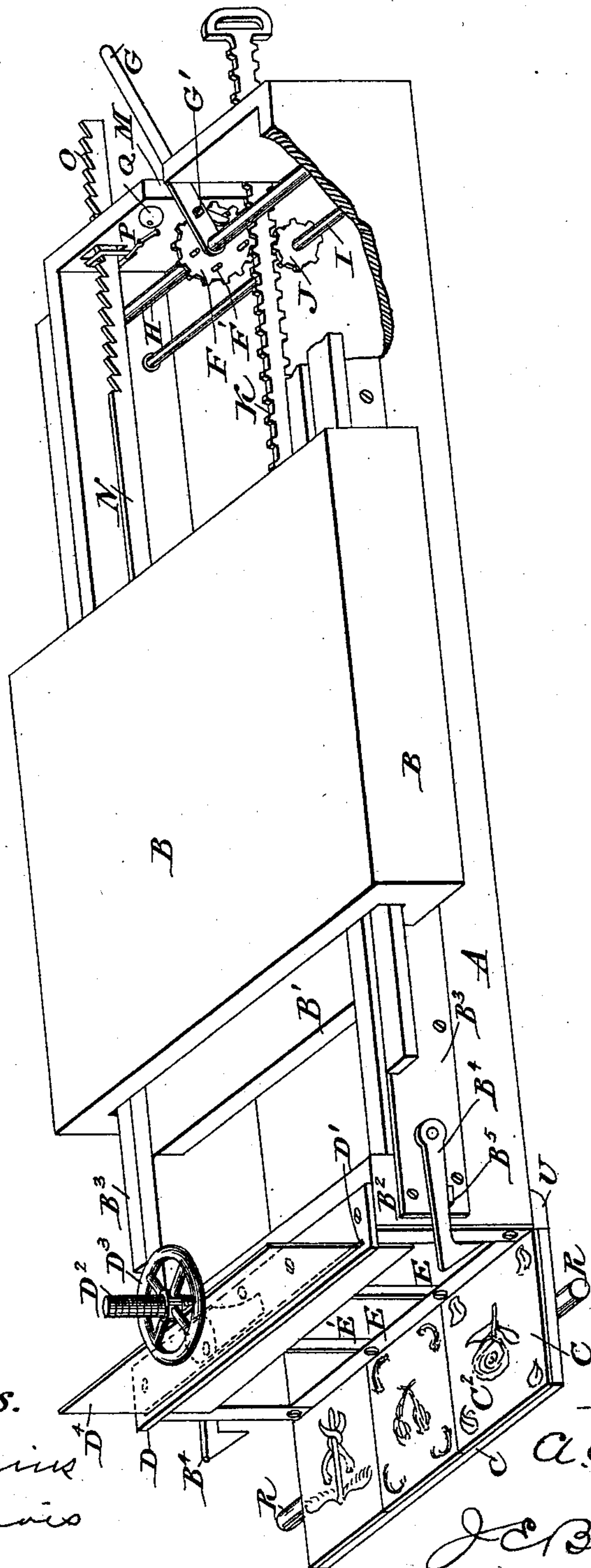
2 Sheets—Sheet 1.

A. C. DODGE.  
BUTTER PRINTER AND WEIGHING MACHINE.

No. 602,042.

Patented Apr. 5, 1898.

Fig. 1.



Witnesses.

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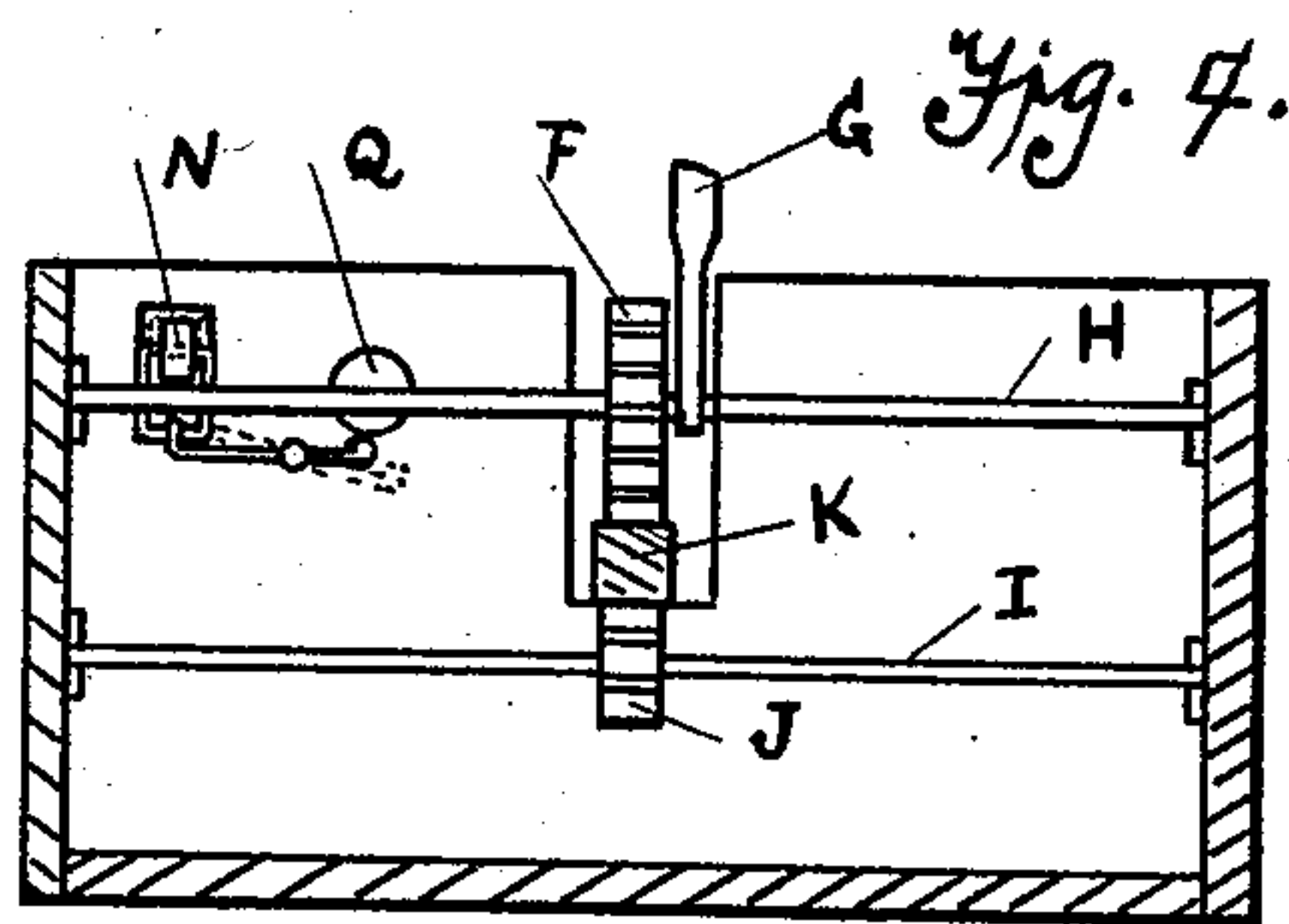
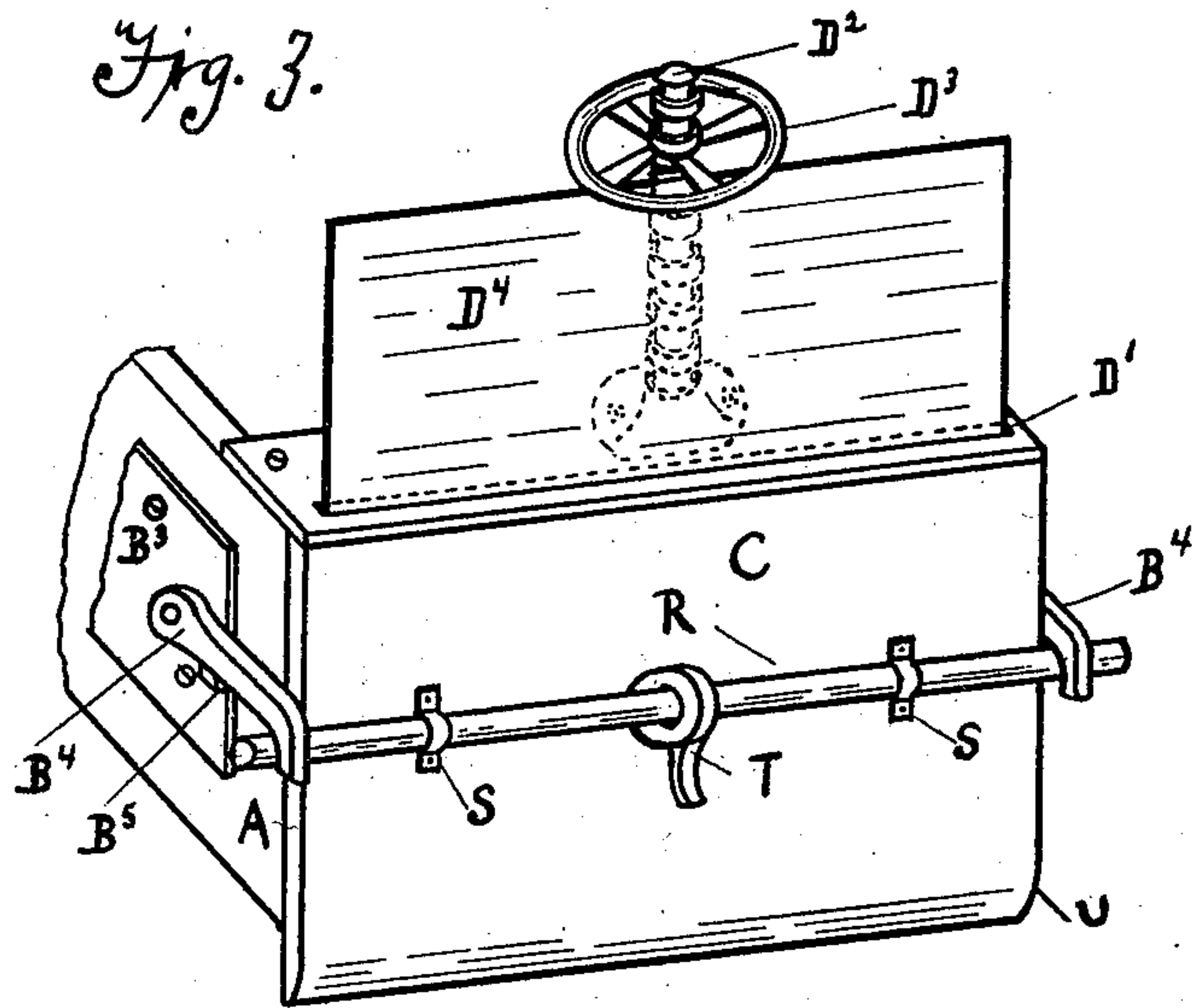
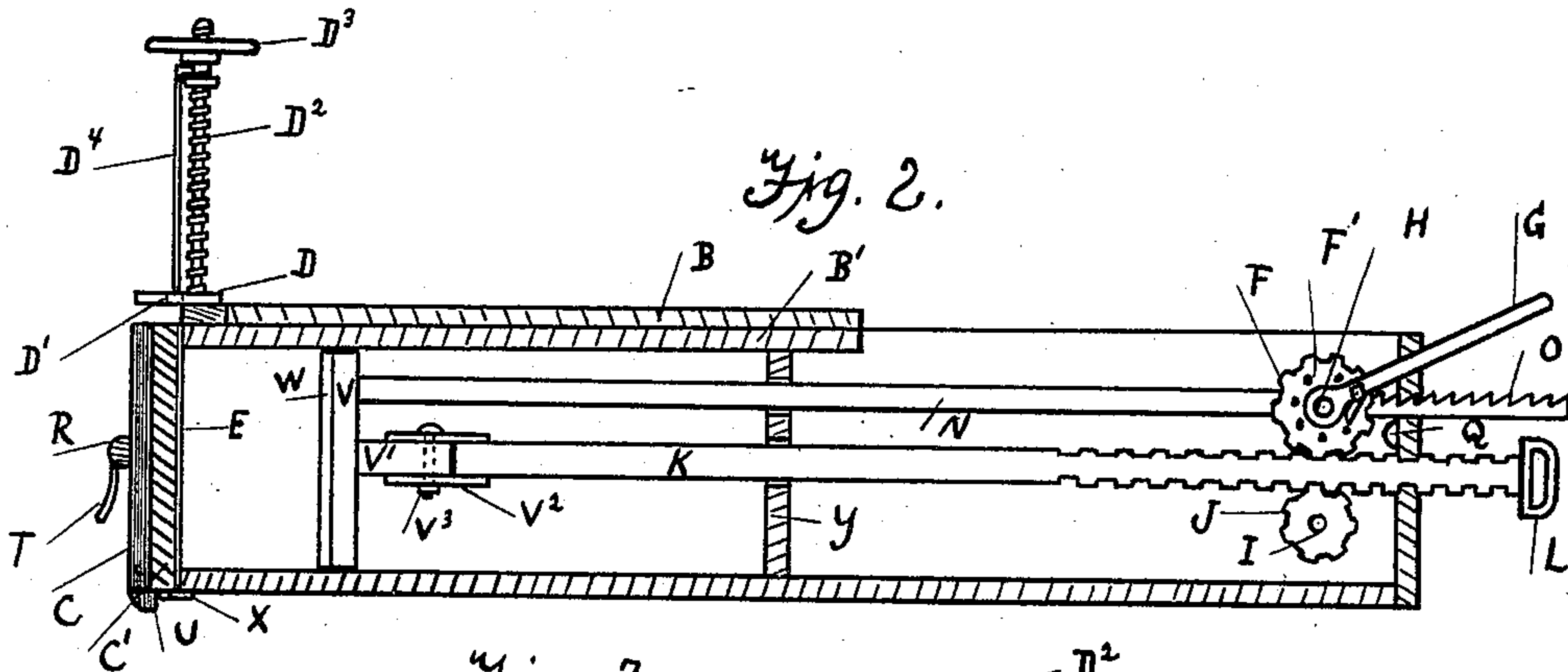
by

J. C. Bookstaver  
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(No Model.)

2 Sheets—Sheet 2.

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BUTTER PRINTER AND WEIGHING MACHINE.  
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Witnesses  
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# UNITED STATES PATENT OFFICE.

ALFRED C. DODGE, OF BINGHAMTON, NEW YORK.

## BUTTER PRINTER AND WEIGHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 602,042, dated April 5, 1898.

Application filed February 18, 1897. Serial No. 624,005. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED C. DODGE, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Butter Working and Weighing Machines; and I do hereby declare that the following specification is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part thereof.

My invention relates to improvements in butter working and weighing machines; and the object of my improvements is to provide a machine which will press and print butter from bulk into pieces of certain weight. I attain this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective of my machine. Fig. 2 is a side view in section of my machine. Fig. 3 is a broken view in perspective of the forward end of my machine. Fig. 4 is a broken view in section of the inside of the rear end of my machine.

In Fig. 1, A represents the main box of my machine; B, the sliding cover; B', the wood lining of the cover; B<sup>2</sup>, the secured end cover; B<sup>3</sup>, the cover-slide; B<sup>4</sup>, the door-catch; B<sup>5</sup>, the catch-stop; C, the door; C', the metal grooves; C<sup>2</sup>, the print-molds; D, the cutter-knife plate; D', the cutter-knife slot; D<sup>2</sup>, the cutter-knife screw; D<sup>3</sup>, the screw-wheel; D<sup>4</sup>, the cutter-knife; E, the front plate; E', the separator-knives; F, the upper cog-wheel; F', the cog-stops; G, the lever; G', the pawl; H, the upper cog-shaft; I, the lower cog-shaft; J, the lower cog-wheel; K, the plunger-shaft; L, the plunger-shaft handle; M, the lever-slot; N, the computing-bar; O, the computing-ratchets; P, the bell-hammer; Q, the bell; R, the door-lever bolt, and U the door-flange.

In Fig. 2 the same letters indicate the same parts, and T indicates the door-bolt lever; V, the plunger; V', the plunger-neck; V<sup>2</sup>, the connecting-collar; V<sup>3</sup>, the collar-pin; W, the wood facing of the plunger; X, the door-hinge, and Y the middle partition of the box.

In Fig. 3 similar letters indicate similar parts, and S indicates the hangers of the bolt R.

In Fig. 4 the same parts are indicated by the same letters.

My butter working and weighing machine is composed of the rectangular box A, having a bottom and two sides, but no permanent top. About the middle of the box A its interior is divided by the partition Y into two parts. The forward part nearest the door is used for the butter-chamber, while the rear apartment contains the pressing mechanism. Running through the center of the box A, through a hole in the partition Y and the slot M in the rear end of the box, is the plunger-shaft K. The forward end of this shaft is secured to the plunger V by the collar V<sup>2</sup> and the pin V<sup>3</sup>. This plunger fits the interior of the box. The rear end of the shaft K is provided on the upper and under surface with cog-teeth, and before it passes out through the slot M runs between the upper cog-wheel F and the lower cog-wheel J, the teeth of which mesh with those of the shaft. These cog-wheels are journaled suitably on the shafts H and I, and the upper cog-wheel is provided with the row of lugs or stops F' on its face about midway between its axis and periphery. The lever G is journaled freely in the shaft H, close to the face of the cog-wheel F, and is provided with the pawl G', which passes the stops F' when the lever is raised and engages them when the lever is pressed downward, thus turning the cog-wheel and forcing the shaft K forward. Attached at one end to the plunger V and passing backward along the side of the box through an opening in the partition Y and then through a similar opening in the rear end of the box is the computing-bar N, provided on the upper side of its rear end with the notches O, so spaced as to measure the space in front of the plunger V to indicate half-pounds in weight.

On the inside of the opening through which the notched end of the computing-bar passes is arranged an eye connected to the bell-hammer P, which is so arranged as to strike the bell Q when the eye drops down into one of the notches O as the bar N is drawn forward



by the movement of the plunger, the notches O having a vertical edge toward the rear and an inclined edge in front.

The plunger-shaft K is provided with the handle L, by which it may be drawn backward.

The forward end of the box A is provided with the door C, hinged to the bottom of the box and extending a little below the bottom of the box in order that it may support itself against the bottom of the box when let down. This door is made of metal and has on its inside the slide-frame C', into which is slid the wood print-blocks C<sup>2</sup>. This door is fastened, when closed, by the rod R catching into the fall-catches B<sup>4</sup> and being turned by the eccentric cam-lever T till strong pressure is secured against the door. The butter-receptacle is closed by the slide-cover B, which is made of metal, with the wood lining B', which when closed slides under the fixed end cover B<sup>2</sup>. The slide-cover B is provided with grooves at its sides which engage the slides B<sup>3</sup>, to which are also attached the door-catch B<sup>4</sup> and the stop B<sup>5</sup>. Secured to the open front of the box is the metal frame or plate E, to which are vertically secured at equal distances the two separator-knives E'.

On top of the front end of the box and overhanging it is secured the cutter-knife plate D, provided with the slot D' directly in front of the plate E. Attached to the center of the knife-plate D is the screw D<sup>2</sup>, having the screw-wheel D<sup>3</sup>, which engages and controls the cutter-knife D<sup>4</sup> by lug and collar.

In operating my machine the door C is closed and fastened, the butter-receptacle is

filled with butter, and the slide-cover B is slid forward to close the top. The lever G is then worked downward and the plunger forced forward until the butter is pressed in a solid mass against the print-molds on the inside of the door. The pressure is then removed by throwing back the lever and the door C is opened. The lever G is again pressed downward until (if a pound-package is desired) the eye drops into the second notch and the bell Q has rung twice. Then the lever is thrown back, and the wheel which separates the cutter-knife is given a quick turn and the knife D<sup>4</sup> drops through the slot D' against the face of the plate E, cutting the butter which has been pushed out, the separator-knives E' dividing the butter into three one-pound packages, each with a print upon its top.

What I claim as my invention, and desire Letters Patent for, is—

In a butter working and weighing machine, the combination with the box A having the sliding pressure-tight cover B and the adjustable retaining and printing door C, with the cutting-knife D<sup>4</sup> operating directly back of said door, the plunger V to which is attached the notched computing and weighing bar N engaging the bell Q by means of the trip-hammer P, the bell Q, the trip-hammer P, and the cog-actuated plunger-shaft K operated by the ratchet-wheel F and lever G; as described and specified.

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