No. 653,991. Patented July 17, 1900.

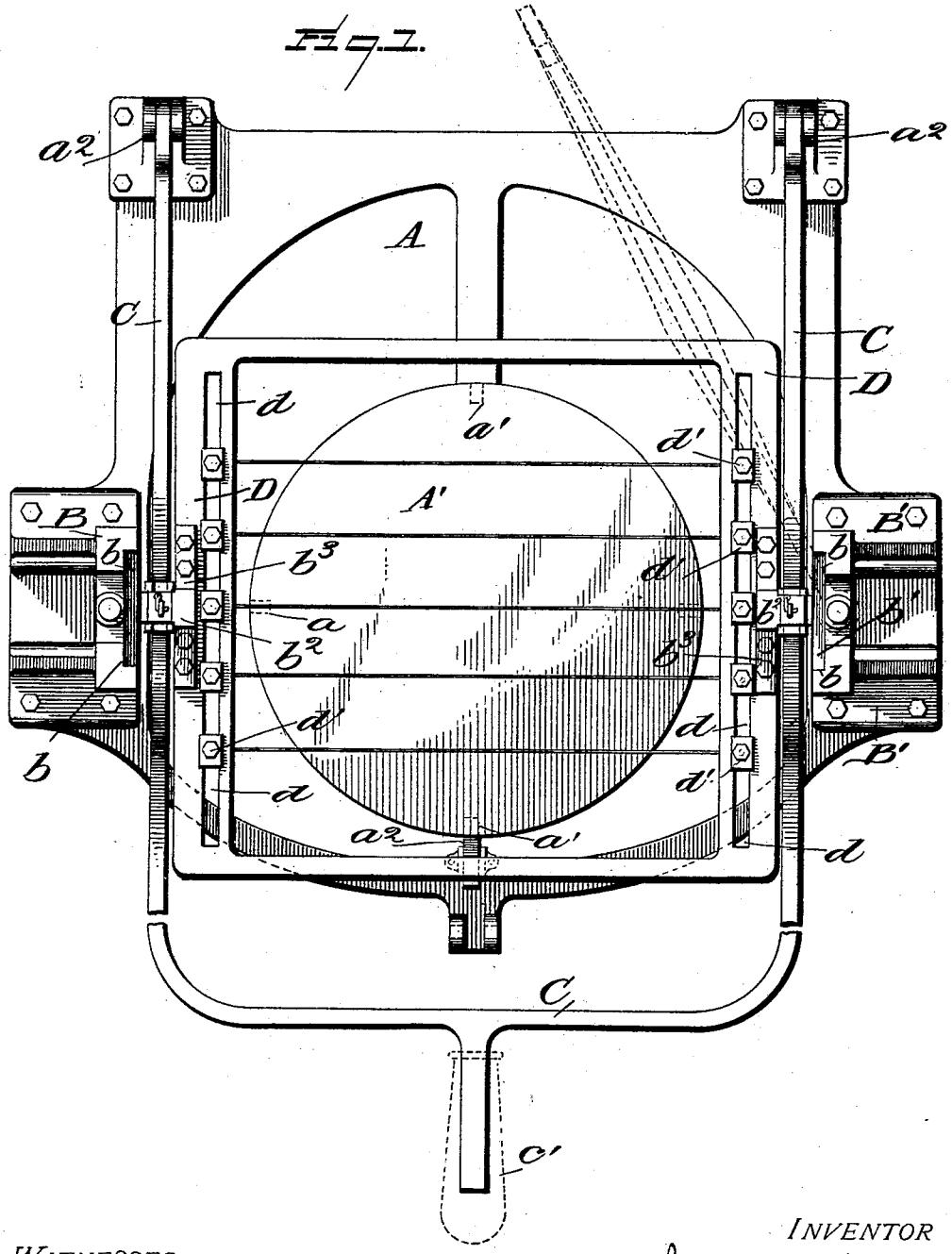
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BUTTER CUTTER.

(Application filed Mar. 15, 1900.)

(No Model.) 3 Sheets—Sheet 1.

Fig. 1.



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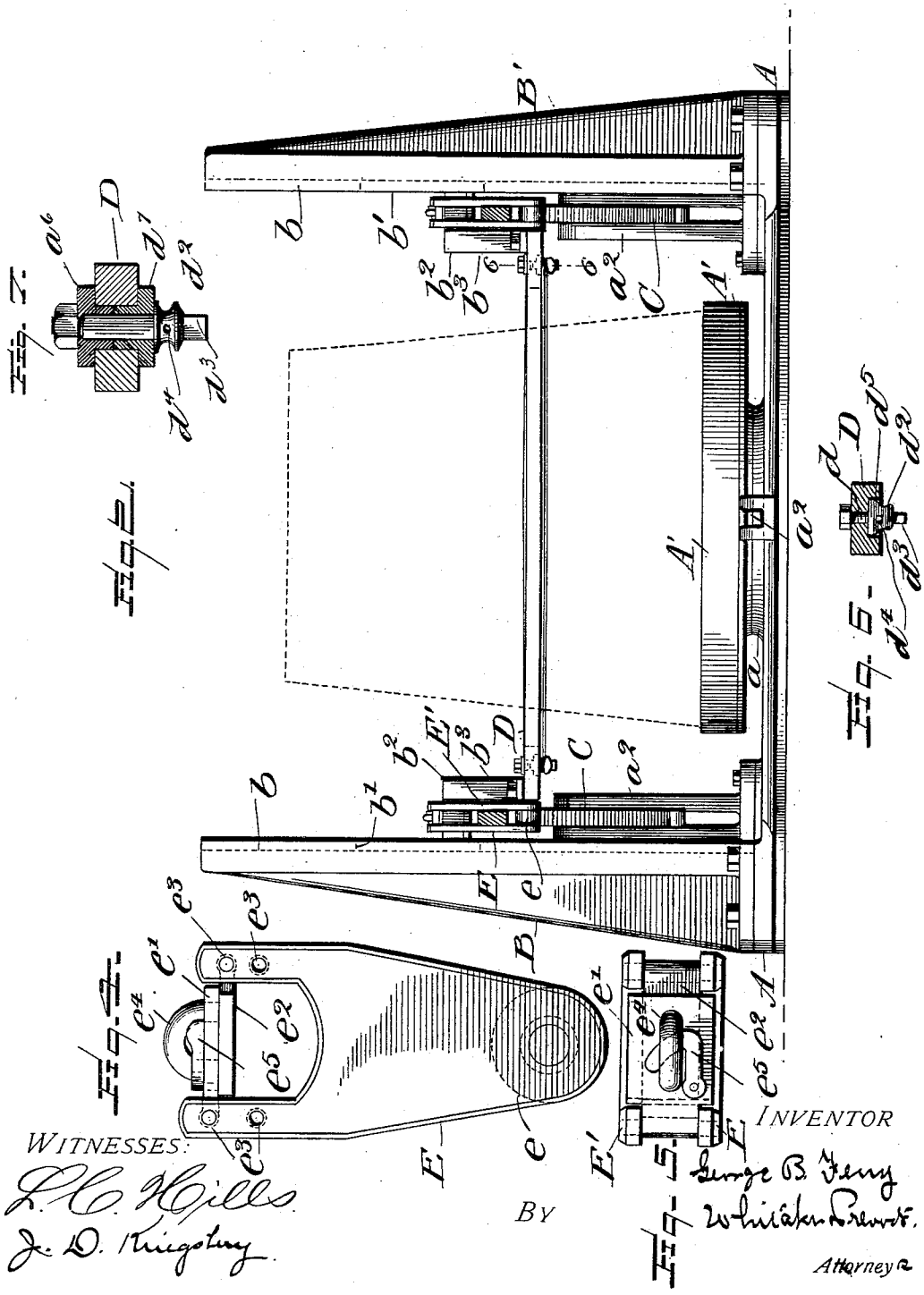


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

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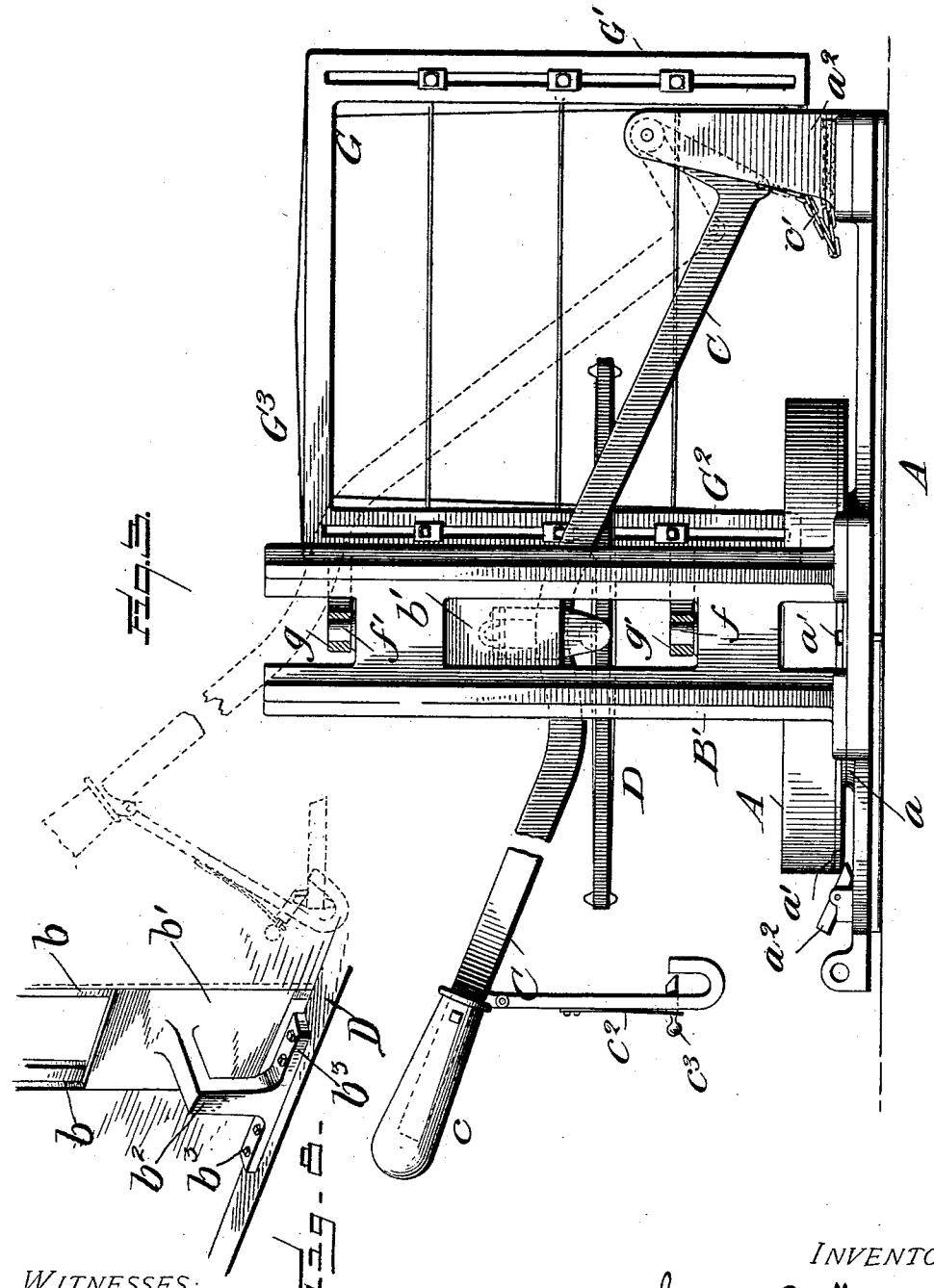


FIG. 3.

FIG. 4.

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UNITED STATES PATENT OFFICE.

GEORGE B. FERRY, OF CLEVELAND, OHIO.

BUTTER-CUTTER.

SPECIFICATION forming part of Letters Patent No. 653,991, dated July 17, 1900.

Application filed March 15, 1900. Serial No. 8,771. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. FERRY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Butter-Cutters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the class of butter-cutters; and it consists in certain new and improved constructions and combinations of parts whereby a very efficient, serviceable, and durable article is furnished.

In the accompanying drawings I have shown the best form in which I have contemplated embodying my invention, and the said invention is fully disclosed in the following description and claims.

In the drawings, Figure 1 is a top or plan view of my said improved butter-cutter. Fig. 2 is a front elevation. Fig. 3 is a side elevation of the same, and Figs. 4 and 5 are detail views showing parts of my improved structure. Fig. 6 is a detail view of the cutter-holding device. Fig. 7 is a detail of a modified form of this device. Fig. 8 is a perspective view of the sliding blocks and connecting parts which serve as guides for the vertically-moving cutter-frame.

In the drawings, A is the base-plate of the machine, which is preferably provided with means by which it may be rigidly secured to the top of a table or counter.

B B′ are two standards secured at opposite sides to the bed-plate of the machine. Between these two standards the bed-plate is provided with the circular elevated portion a, upon which is pivoted the turn-table A′. At the rear of the base A are pivoted two short upwardly-extending posts or standards a^2. The upper ends of these two standards are provided with pivots upon which are journaled or pivoted the bifurcated ends of the operating-lever C, which has the general form shown in Figs. 1 and 3. The forward end of this lever is preferably provided with a wooden or other non-metallic hand-grasp c. One or both of the bifurcated ends of this lever have attached thereto the chain or other flexible connection c', the opposite end of which is secured to the bed-plate or to the base of the standard a^2, so that when the said lever is thrown backward to a position slightly beyond the perpendicular it will be held from farther movement backward by the device c'. The inner faces of the standards B B′ are provided with grooves b, and in these grooves are mounted sliding blocks b'. To each of these blocks are secured inwardly-projecting arms b^2, the lower end of the downwardly-extending portion b^3 of which is secured to the cutter-frame D. This cutter-frame is of rectangular form, as shown in Fig. 1. At each side of the frame is a slot d, and in these slots are mounted the cutter-keys or cutter-securing devices d'. These devices are of the form best shown in Figs. 2 and 6, and consist in a screw or bolt having the circumferentially-grooved head d^2, provided with the downwardly-extending squared portion d^3. The upper end of this screw or bolt is provided with a threaded portion and a nut, as shown. The grooved head is provided with an aperture passing entirely through the same, as at d^4. The sides of the frame D are preferably provided on the under side with the enlarged groove d^5, to receive a portion of the head in order to bring the cutter-wires in close proximity to the under face of the frame. The cutters, which are preferably of wire, as shown in Fig 1, are secured to the frame by passing the ends of the same through the aperture d^4, then turning the securing device to bring the wire to the proper degree of tension, and then tightening the nut against the upper side of the frame. Should the cutter-wires become slackened or stretched at any time, the same can be again stretched or drawn as taut as may be desired by loosening the nut and again turning the device by the squared portion d^3 and again tightening the nut on the upper side of the frame. It is evident that the arms d^2 may be secured to the sliding block b' or formed integrally therewith, as may be found most convenient.

The bifurcated portions of the lever C are operatively connected with the arms b^2 by two yokes, one on each side of the machine. These devices are most fully shown in Figs. 4 and 5. Each of these yokes is composed of two side pieces E E′. At the lower end of

the yoke a roller e is journaled between the sides E E′ upon a gudgeon or pintle secured to one of the two sides or secured to said sides in any other preferred manner. The top or under end of the sides E E′ is recessed, as clearly shown in Fig. 4, and between the two sides is pivoted the two securing-flaps e' e^2, which are provided with trunnions entering apertures e^3 in the sides. These flaps are located one above the other, as shown in Fig. 4, the lower one e^2 being provided with an upwardly-extending staple e^4, the upper flap e' being provided with a slot to receive such staple and the securing-hasp e^5. In order to secure the yokes to the arm b^2, the flaps are turned outwardly and the yoke raised until the arm b^2 rests in the recess in the top of the two sides E E′. The lower flap e^2 is then turned inwardly upon the top of the arm b^2, and the flap e' is then turned inwardly upon the top of the flap e^2, the staple e^4 passing through the slot in the upper flap. The securing-hasp e^5 is then turned to the position shown in Fig. 5, and the yoke is thus secured. The rearwardly-extending part of the lever C passes between the sides of the yoke above the roller e, so that in the downward movement of the lever to depress the cutter-frame D the bifurcated portions of the lever work against the rollers e of the two yokes.

The standards B B′ are recessed, as shown most clearly in Fig. 3, and each is provided with upwardly-extending pintles f f' to receive a horizontally-acting cutter-frame G. This cutter-frame is composed of the two sides G′ G² and the connecting upper bar G³, which is made of sufficient strength to hold the sides G′ G² in position under the strain of the cutter-wires. The sides of this frame are slotted in the same manner as the sides of the frame D and the cutter-wires are connected to the frame in a similar manner to the cutter-wires of the frame D. The side G² of this frame is provided with the outwardly-extending arms g g', which are provided with apertures fitting the pintles f f'. The turn-table A′ is provided on its under side with notches a', as shown in Fig. 1, to receive the spring-latch a^2 and hold the turn-table from movement.

The operation of my device is as follows: A tub of butter is turned upside down upon the turn-table and the tub removed, leaving the butter upon said table, as shown in Fig. 2 in dotted lines, the cutter-frames D and G having been previously removed. The cutter-frame G is then placed upon its pintles f f' in the position shown in dotted lines in Fig. 1, and said frame is then swung toward the front of the machine until it has effected the horizontal cutting of the butter. The frame D is then placed in position and the lever C depressed, cutting the butter vertically. The frame D is then again raised, the turn-table moved one-quarter of a revolution, and the frame D again depressed, finishing the cutting of the butter into blocks. It is apparent that the top of the turn-table may be grooved to receive the cutter-wires if this is found desirable, and it is apparent that each of the frames D and G may be provided with such a number of cutters or cutter-wires as shall be found most desirable. These cutters may be placed a distance apart to suit the preferences of the person using the same. By preference the standards B B′ will be of such a height and the lever C will be of such a length that the cutter-plate D may be raised above the frame G and the butter upon the turn-table without leaving the standard; but this is not an essential feature of my construction. The construction of the parts for mounting the frame G upon its supporting-standard may be so modified that the frame G may at all times remain upon its pivoted bearing when not in use or during the operation of the vertical cutter-frame D.

In Fig. 7 is shown a modified form of cutter-securing devices. In this form the retaining-bolt d passes through the plates d^6 and d^7, which are of the form shown, and when the nut is tightened these plates clamp the edges of the slot between them in a well-known way. This construction can be used with a frame-bar of the form shown in Fig. 6 or with one of the forms shown in Fig. 7.

I also provide the lever C with a hook c^2, as shown in full and dotted lines in Fig. 3. This hook has a pivoted connection with the lever C and is provided with a spring-catch c^3. As the lever is raised this hook comes in contact with the front bar of the frame D and engages it, the spring-catch yielding to permit the bar to pass within the hook and locks it in that position. When thus engaged by the hook c^2, the frame D may be removed from its engagement with the standards B B′ and swung backward to the rearmost position of the lever C, and thus be held by it until brought forward for further use.

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

1. In a butter-cutter, the combination with two guiding-supports, of a butter-receiving table located between them, a movable cutter and guides, controlled by said supports, means for operating said cutter vertically in said guides, and a horizontally-vibrating cutter pivoted to one of said supports, substantially as described.

2. In a butter-cutter, the base, the guiding-standards, the bifurcated lever, the cutter-frame D and means connected therewith for engaging the guides of the standards, substantially as described.

3. A cutter-frame having two opposite side bars provided with slots through said bars from front to rear, wire-securing devices located in said slots and clamping means for securing them to the frame-bars, said wire-securing devices extending beyond said bars at one side of the frame and cutter-wires secured to said wire-securing devices at one side of the frame, whereby one or more of the

cutter-wires can be removed without removing its securing devices, substantially as described.

4. A cutter-frame having side bars provided with slots extending from the forward face of the frame to the rear face thereof, cutter-securing devices consisting of a bolt having a grooved head, a perforation at the bottom of said groove and a squared projection extending beyond the head, said devices being secured in the said slots with the heads projecting from the forward side of the frame-bars, and cutter-wires secured to the heads of said securing devices, substantially as described.

5. A wire cutter-securing device consisting of a screw or bolt having a grooved head, perforated at the bottom of said groove, and a squared projection extending beyond said head whereby the wires can be extended across the frame outside of the same and be prevented from slipping off of said head, substantially as described.

6. The combination with the frame having the slotted sides the grooves on one face of the same and the cutter-securing devices having the perforated head, said head adapted to fit the grooves of the frame to bring the wires in close relation with one side of the frame, substantially as described.

7. In a butter-cutter, the combination with the vertically-operating cutter-frame and the guiding devices therefor, of the bifurcated operating-lever and the yokes for connecting the bifurcated parts of the said lever with said frame, substantially as described.

8. The combination with the operating-lever and a movable part operated thereby, of the yoke for connecting the two, the same consisting of the two side pieces, the roller interposed between them, the pivoted securing-flaps and the locking devices for said flaps, substantially as described.

9. In a butter-cutter, the combination with the vertically-operating cutter-frame and the guiding devices therefor, of the lever for actuating said cutter-frame, and the hook connected to said lever to engage said frame for removing said frame from its guiding devices, substantially as described.

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

GEORGE B. FERRY.

Witnesses:

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HENRY H. INKLEY.