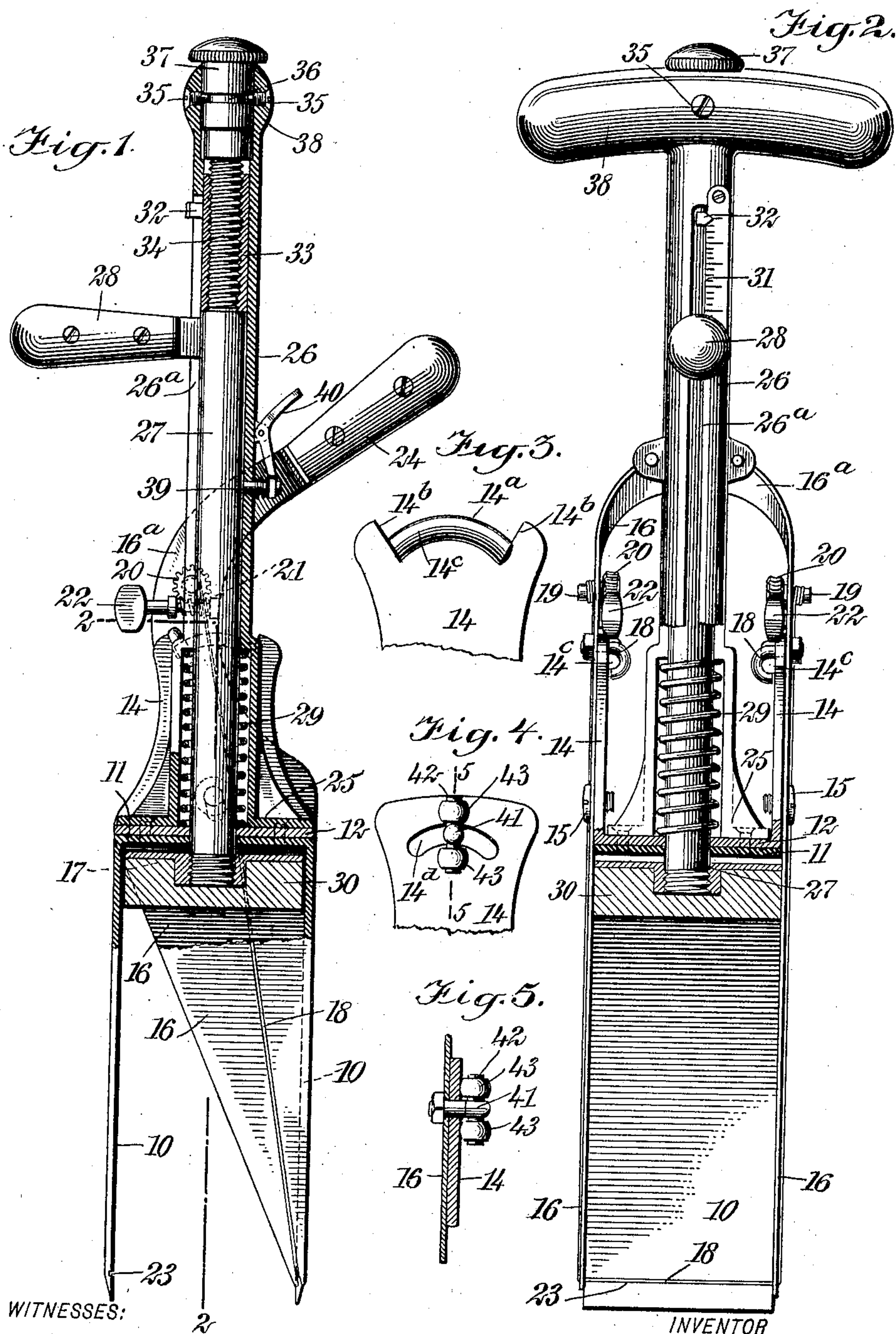


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G. ERICSON.
BUTTER CUTTER.
APPLICATION FILED DEC. 1, 1905.



WITNESSES:

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BUTTER-CUTTER.

No. 827,622.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GOTTFRID ERICSON, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Butter-Cutter, of which the following is a full, clear, and exact description.

The invention relates to a butter-cutter of that class in which cutting edges are provided to be forced into the tub or mass of butter, thus forming a cake which is subsequently separated from the body of the butter by a cutting-wire or the like, the device being then withdrawn with the cake of butter thereon and being provided with an ejecting-plunger by means of which the cake may be delivered.

The object of my invention is to simplify the devices of this sort heretofore produced, so as to enable the desired end to be attained at less expense. I attain this object by certain special features of construction and relative arrangement of parts, all of which will be fully set forth hereinafter and particularly pointed out in the claims.

Reference is to be had to the accompanying drawings, which illustrate as an example the preferred embodiment of my invention.

In the drawings, Figure 1 is a vertical section of the invention. Fig. 2 is an elevational view with parts in section on the line 2 2 of Fig. 1. Fig. 3 is a detail elevation showing the preferred means for guiding the cutting-arms. Fig. 4 is a detail view of a modified form of these devices. Fig. 5 is a section on the line 5 5 of Fig. 4.

The device is provided with two oppositely-disposed cutter-plates 10, which are preferably formed of an integral section of metal connected by a web 11, which is located at the outer or upper ends of the cutting-plates and extend across between them. Fastened to said connecting-web 11 is a plate 12, which has at each end outwardly-extending brackets or standards 14, which are provided with arc-shaped upper edges 14^a, terminating in shoulders 14^b, and at the inner sides of the plates these edges are provided with beads 14^c, curved in conformity to the edges 14^a. Secured in each bracket or standard 14 is a headed stud or screw 15, forming the pivots of the side cutting-arms 16. These arms are provided, as indicated by the broken lines in Fig. 1, with slots 17, in which said studs 15 are

received. The arms are also provided with hooks 18, which are secured to the arms and loosely embrace the respective beads 14^c. Consequently the guiding-arms 16 when swinging on the pivot-studs 15 are forced also to slide thereon, the slots 17 permitting this sliding movement, so that the lower or inner ends of the cutting-arms are thereby caused to move straight across between the lower extremities of the cutting-plates 10, as contradistinguished from moving in an arc between these two parts. The side cutting-arms 16 are tapered, as shown in Fig. 1, and when in position at one side of the device their outer edges extend vertically true with the side edges of the adjacent cutting-plate 10. When the cutting-arms reverse their position their opposite edges extend vertically true with the side edges of the opposite cutting-plate 10. Said arms 16 perform, therefore, the double function of cutting the butter away between the side edges of the plates 10 and also of forming two sides walls of the inclosure or box in which the print or block of butter is held when it is withdrawn from the remaining mass of butter. The arms 16 carry the usual cutting-wire 18, which extends across between the pointed inner ends of the arms, as shown, and up alongside each arm, the ends of the wire being wound over pins 19, which are rotatable in the arms and provided with worm-wheels 20, engaging arms 21 on thumb-pins 22, which pins are revoluble in the respective arms. By this means the tension of the wire 18 may be regulated at will. The inner surfaces of the plates 10 are formed with grooves 23, which receive the wire 18, so as to permit the parts 10 and 16 to be entered into the mass of butter without interference on the part of the wire. After this has been done it is only necessary to swing the arm 16 across from one to the other side of the device, thus not only cutting away the butter at the sides between the edges of the plates 10, but also cutting away the butter at the inner ends of the said plates, thus completely separating the block of butter from the remaining mass. The arms 16 have inwardly-curved extensions 16^a, which meet each other at a handle 24, and by means of which handle the arms 16 may be operated, as explained.

Fastened on the plate 12 is the base 25 of a tubular stanchion 26. This stanchion loosely receives a plunger-rod 27, and the stanchion has a longitudinal slot 26^a, through which extends the tang of a handle 28, fastened to

said plunger-rod. Inclosed in the enlarged portion of the tubular stanchion 26 is a helical spring 29, which bears on the plate 12 and against the handle 28 when the rod 27 is pushed down, this spring tending to return the rod to the raised position shown in Fig. 1. The lower end of the rod 27 projects through the plates 12 and 11 and carries a plunger-block 30, which slides between the side plates 10 and cutting-arms 16 and is intended to eject the block or print of butter after same has been severed from the mass. The upper portion of the lot 26^a is provided with a scale or graduation 31, and coacting therewith is a pointer 32, carried on a threaded sleeve or nut 33. This sleeve or nut is loosely contained within the upper part of the tubular standard 26, and acting within the same is a screw 34. The screw is held in the upper extremity of the standard 26 to rotate by means of set-screws 35, operating in an annular groove 36 in a head 37 of the screw. Said head projects outside of the standard and is knurled to permit easy manual operation of the screw. At its upper extremity the stanchion 26 carries a transversely-disposed handle 38. (Best shown in Fig. 2.) By rotating the screw 34 the nut 33 may be moved up or down in the stanchion 26, and this nut lying in the path of the plunger-rod 27 will limit the upward movement thereof. Consequently by means of this device the position of the plunger-block 30 may be regulated at will, thus regulating the size of the block or print of butter separated from the remaining mass. 39 indicates a stop-pin, which operates through the walls of the tubular standard 26 and is in connection with a thumb-lever 40, by means of which the stop-pin may be moved inward after the descent of the plunger-rod 27, so that the stop-pin will limit or prevent the return movement of the plunger. This constitutes another means for limiting the inward movement of the block 30, and this second device is useful in the event should it be desired to greatly reduce the amount or weight of the butter separated. For instance, if the cutter is supposed to have one pound capacity by operating the stop 39 the capacity may be reduced to one-half pound or to one-quarter pound.

Figs. 4 and 5 illustrate a modification of the means for imparting a sliding movement to the side cutting-arms 16. This modification consists in an arc-shaped slot 14^d, taking the place of the bead 14^c. Through these slots eyebolts 41 extend, and the eyebolts carry pins 42, on which rollers 43 are arranged. These rollers run against the sides of the brackets 14, while the eyebolts running in the arc-shaped slots 14^d cause the side cutting-arms to take a sliding movement at the same time that they swing around the pivot-studs 15.

In the use of the invention the nut 33 or

the stop-pin 39, if desired, should be adjusted so as to place the ejector-block 30 in the proper position. This block serves, it will be observed, the twofold function of ejecting the print or block of butter and of adjusting or controlling the size of said print. After the block has been adjusted to the desired position the side plates 10 and cutting-arms 16 should be forced into the mass of butter from which the block or print is to be taken until the butter meets the block. Then the handle 24 should be operated so as to cause the side cutting-arms 16 to swing across from one plate 10 to the other, these plates thus keeping the butter at the sides and carrying the wire 18 across between the ends of the plates 10, so as to cut off the butter at the inner end of the print or block. The device should then be withdrawn from the butter, the block or print being held between the side cutting-arms 16 and the plates 10, and the operation is ended by forcing out the plunger-block 30, thus ejecting the print.

Having thus described the preferred form of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A butter-cutter having two flat oppositely-arranged side plates adapted to be inserted into the mass of butter, and flat side cutting arms or plates located opposite each other and movable across from the edges of one side plate to the edges of the opposite side plate, said cutting-arms serving to assist in holding the print between the side cutting-plates, and to separate the sides of the print from the remaining mass of butter.

2. A butter-cutter having two flat oppositely-arranged side plates adapted to be inserted into the mass of butter, flat side cutting arms or plates located opposite each other and movable across from the edges of one side plate to the edges of the opposite side plate, said cutting-arms serving to assist in holding the print between the side cutting-plates, and to separate the sides of the print from the remaining mass of butter, and an end cutting device held by the inner ends of the side cutting-arms, for the purpose specified.

3. A butter-cutter having walls adapted to be entered into the mass of butter to form the print, an end cutting device adapted to sever the end of the print from the mass of butter, pivotal arms mounting said end cutting device, said arms having sliding movement on their pivots, an arc-shaped guiding-bead, and a member carried by one of the arms and engaging said arc-shaped bead to impart sliding movement to the arms.

4. A butter-cutter having walls adapted to be entered into the mass of butter to form the print, an end cutting device adapted to sever the end of the print from the mass of butter, pivotal arms mounting said end cutting device, said arms having sliding movement on

their pivots, an arc-shaped guiding-bead, and a member carried by one of the arms and engaging said arc-shaped bead to impart sliding movement to the arms, said member
5 comprising a hook fastened to the arm and embracing the bead.

10 5. A butter-cutter having walls adapted to be entered into the mass of butter to form the print, an ejector coacting with said walls, a plunger-rod connected to the ejector, a tubular stanchion in which the plunger-rod is movable, a nut in the stanchion to limit the movement of the plunger-rod, and a screw coacting with the nut to adjust the position
15 thereof.

20 6. A butter-cutter having walls adapted to be entered into the mass of butter to form the print, an ejector coacting with said walls, a plunger-rod connected to the ejector, a tubular stanchion in which the plunger-rod is movable, a nut in the stanchion to limit the

movement of the plunger-rod, a screw coacting with the nut to adjust the position thereof, a stop movable into the stanchion and located beyond said nut, and means for operating the stop. 25

7. A butter-cutter having walls adapted to be entered into the butter to form the print, a tubular stanchion, an ejector, a plunger-rod connected to the ejector and operating in the stanchion, an adjustable means at the outer end of the stanchion for limiting the movement of the plunger-rod, a stop-pin located inward of said adjustable means, and devices for operating the stop-pin. 30

35 In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GOTTFRID ERICSON.

Witnesses:

ISAAC B. OWENS,

EVERARD B. MARSHALL.