

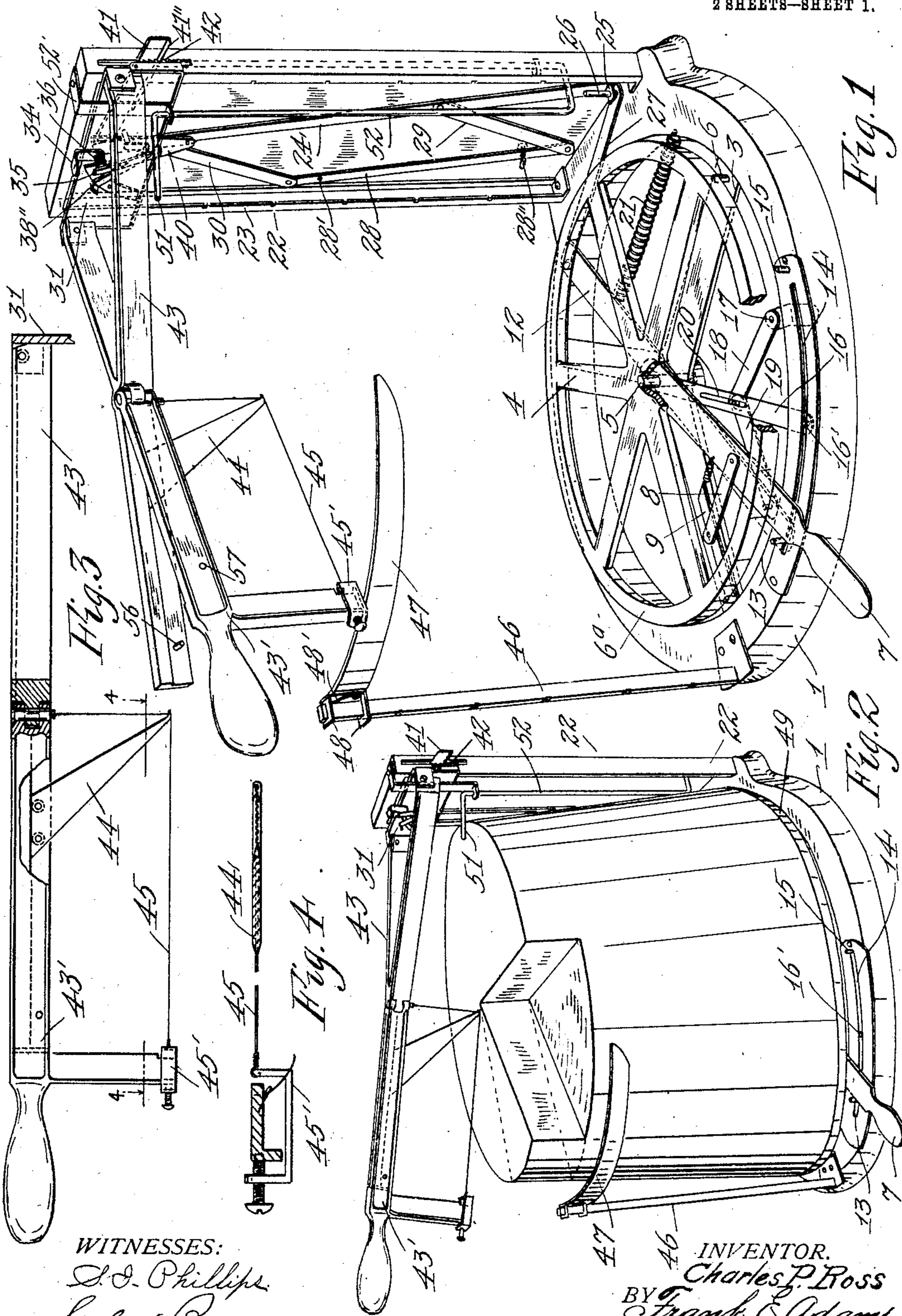
No. 785,978.

PATENTED MAR. 28, 1905.

C. P. ROSS.  
BUTTER CUTTER.

APPLICATION FILED MAY 24, 1904.

2 SHEETS—SHEET 1.



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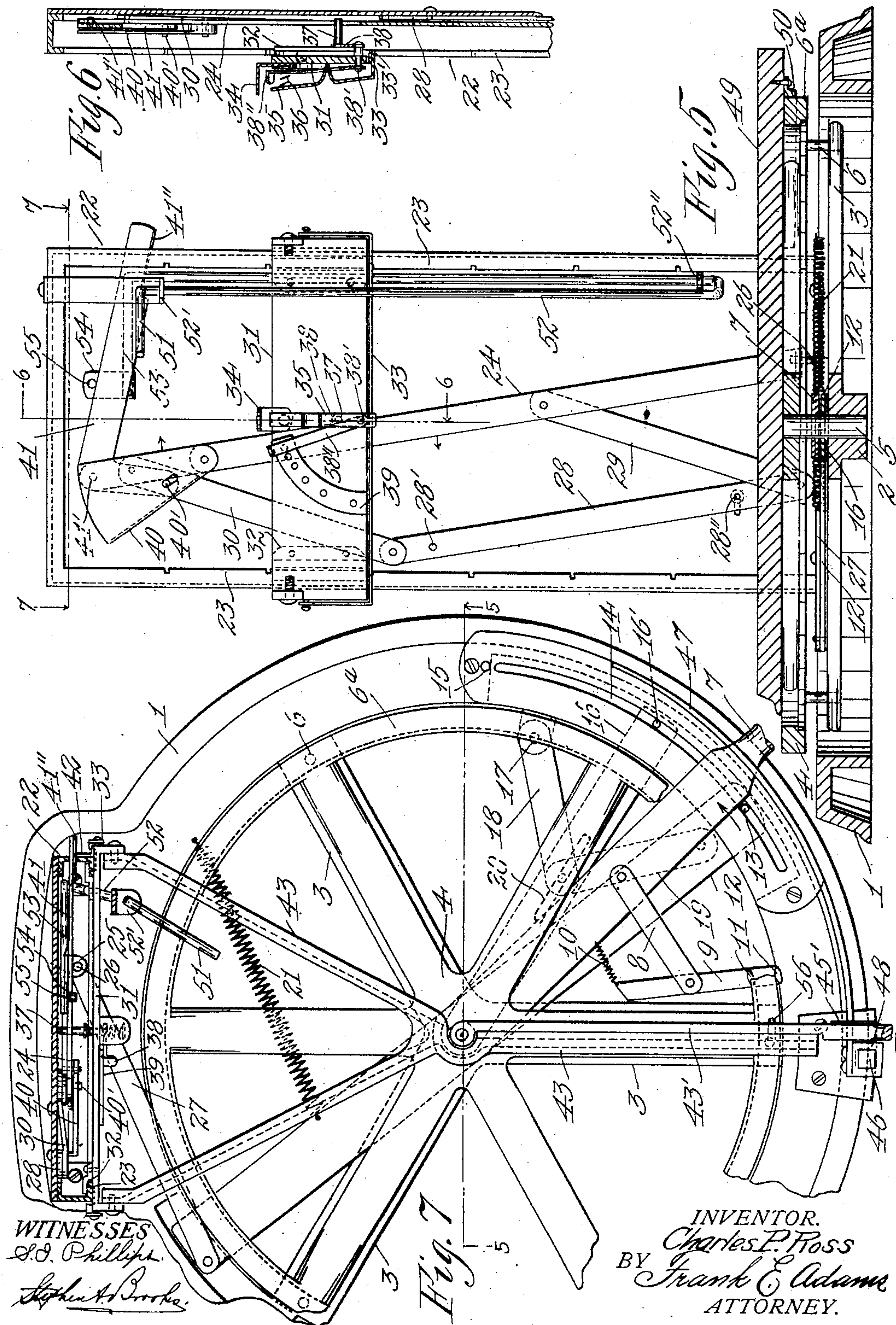
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# UNITED STATES PATENT OFFICE.

CHARLES P. ROSS, OF SEATTLE, WASHINGTON.

## BUTTER-CUTTER.

SPECIFICATION forming part of Letters Patent No. 785,978, dated March 28, 1905.

Application filed May 24, 1904. Serial No. 209,577.

*To all whom it may concern:*

Be it known that I, CHARLES P. ROSS, a citizen of the United States of America, and a resident of the city of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Butter-Cutters, of which the following is a specification.

My invention relates to improvements in machines adapted to successively sever, by the production of vertical and horizontal slits, blocks from a body of butter; and the primary object thereof is the production of an improved apparatus for cutting successively blocks of predetermined weight.

The invention has special reference to machines of this class involving a rotary platform and variable indicating mechanism for determining the degree of rotation of the platform, and is especially adapted for cutting tub-butter, and has for a further object to provide means whereby the indicating mechanism is adjusted in conformity with the taper of the body of butter and means whereby said mechanism is also adjusted in conformity with the specific gravity of the butter and in conformity with the thickness of the layer from which the blocks of butter are cut.

Further, the invention consists in providing an improved cutting means adjustable vertically with respect to the platform and which at such adjustments is capable of cutting the vertical and horizontal slits in the body of the butter.

Further objects and advantages will be set forth in the following description and those features upon which I desire protection defined in the appended claims.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate like parts throughout the several views, Figure 1 is a view in perspective of my improvement, a portion of the rotary platform being broken away. Fig. 2 is a similar view illustrating the same with a body of tub-butter resting on the platform and having a portion of the upper imaginary layer cut therefrom and illustrating the cutter in a position about to descend to cut a succeeding block. Fig. 3 is

a detail view, in side elevation, of the cutter-support with the cutter thereon, parts being broken away. Fig. 4 is a section taken on line 4 4 of Fig. 3, a portion of the cutter-wire being removed. Fig. 5 is a section taken on line 5 5 of Fig. 7 with the cutter-support removed. Fig. 6 is a section taken on line 6 6 of Fig. 5; and Fig. 7 is a sectional view taken on line 7 7 of Fig. 5, parts of the platform and base being broken away and the cutter and its support shown attached.

My improved machine embodies a base 1, which is preferably of open form and is provided with a hub 2, secured to the inner ends of the radial spider-arms 3 of the base. Mounted above the base is a rotary platform 4, which is also of open formation and provided with a central hub, through which projects a journal-pin 5, having its lower portion fixed in the hub 2.

In order to space the platform from the base, I rigidly mount on the spider-arms 3 studs 6, which engage the under face of the outer portion 6<sup>a</sup> of the platform, which, as will be observed, is of substantially ring or annulus form.

7 indicates an operating-handle pivoted on the pin 5 at a point beneath the platform and having one of its ends projecting beyond the edge thereof, whereby it can be readily grasped by the operator, and to this handle is pivoted a link 8, which is also pivoted to a clutch-arm, as 9, which latter is held in an inoperative position by a spring 10 and is provided at its outer end with a pair of lugs 11, which loosely embrace the outer portion 6<sup>a</sup> of the platform. Thus when the handle is operated or swung on its pivot in the direction indicated by the arrow (see Fig. 7) the clutch-arm 9 will be swung by the link 8 to an angular position, and thereby causing the lugs 11 to clutch the platform and cause it to move with the operating-handle. After the handle has been thus operated it is returned to its first or normal position, the lugs of the clutch-arm during this movement sliding freely over the portion 6<sup>a</sup> of the platform by reason of its pivotal connection with the link 8 and the action of the spring 10 thereon. The prompt return of the handle, however, is unessential, except



when setting the mechanism to cut a succeeding layer, in which instance strain on the pivots and small parts of the set mechanism is avoided by having the handle out of the path  
5 of travel of the indicator 13.

12 indicates an indicator-arm fulcrumed on the pin 5 and having its opposite ends projecting beyond the edges of the platform, and at one end this arm is provided with a pin or  
10 indicator 13, which limits the throw of the handle 7 in one direction and which is movable with the arm in a segmental slot 14 in the base. Coacting with this movable indicator 13 is a stationary pin or indicator 15,  
15 which limits the throw of the handle 7 in the other direction. In connection with indicators 13 and 15 I provide an intermediate indicator-arm 16, which is swingingly mounted on pin 5 and, like arm 12, carries an indicator  
20 16'; but the indicator in this instance does not project above the upper face of the base, and thus when the handle 7 is swung it will move freely thereover.

17 is a fixed stud carried by the base, and  
25 18 and 19 are links pivotally connected at their inner ends and having their pivot extended and riding in the slot 20 of the arm 16. The links 18 and 19 have their outer ends pivoted to the stud 17 and arm 12, respectively,  
30 by reason of which construction, the links 18 and 19 being of equal length and one having a fixed pivot, as heretofore set forth, the intermediate arm will be moved one-half of the distance of the arm 12 and, as illustrated in  
35 the present case, will always retain its position central with respect to the indicators 13 and 15, respectively, and the edge of the handle 7 facing the indicator 13.

21 indicates a spring which has a tendency  
40 to return the indicator to its normal position. Secured to the base is a perpendicular hollow frame, as 22, open on its inner side and having inturned edge flanges 23, provided with spaced-apart notches, and within this frame I  
45 mount the primary and auxiliary set mechanisms, which control the movement of the indicator-arms in such a manner that the indicator 13 is moved in the direction of the arrow. (See Fig. 7.)

50 The primary set mechanism comprises a laterally-movable inclined bar 24, which at its lower end is formed with an angular-apertured ear 25, in which the pin 26 of the link 27 is slidably received, and the other end of this  
55 link is pivoted to arm 12.

An inclined adjustable bar 28, pivoted at 28', is arranged adjacent bar 24 and is similarly inclined and has pivotally connected to its opposite ends links 29 and 30, which are  
60 also pivotally connected to bar 24 to movably support the same. This bar 28 is normally held against movement by a set-screw 28'', projecting into a suitable slot in the frame; but by moving the set-screw along in its slot  
65 the inclination of bar 28 can be varied to ad-

just the inclination of bar 24. By reason of this construction when pressure in a vertical plane is brought into engagement with bar 24 said bar will be given a slight lateral and upward movement, which movement will be  
70 transmitted to the indicator-arm 12 to adjust the indicator 13 relatively to indicator 15.

The bar 24 is adjusted to move the indicator 13 toward the indicator 15 by mechanism which embodies a carrier 31, extending across  
75 the open side of frame 22 and slidably held on the flanges thereof by clips 32. Connected at its ends to the ends of the carrier 31 and embracing a portion of the carrier ends and the lower edge thereof is a yoke 33, which  
80 carries projections or tongues 33' for reception in the notches of the frame-flanges, whereby the carrier is securely held in its adjusted position.

Secured to the yoke is an upwardly-extending finger-grip 35, which when it is desired  
85 to disengage the tongues 33' from their notches is depressed at its upper end to swing said yoke outwardly, and when this end is depressed the finger-grip 34, which is secured  
90 to the carrier, can then also be grasped to adjust the carrier vertically. The grip 35 is returned to its normal position by a spring, as 36.

37 indicates a set-pin which is adapted for engagement with one edge of the bar 24,  
95 whereby the latter is forced laterally, as heretofore set forth, and as I have found that it is often desirable that the movement of the bar should be varied to meet exigencies incident to the fact that the specific gravity of  
100 butter varies in different bodies I mount the stud on a crank-arm 38, fixed to a pin 38', projecting through the carrier 31 and provided with an arm 38'', which is preferably formed of resilient metal and provided with a tooth  
105 adapted to engage in the recesses of the segment 39. This construction permits of the lateral adjustment of the set-pin 37 during the setting operation.

It is well known that bodies of butter from  
110 the same size tub are oftentimes found to vary in height, and in order to meet this exigency I propose to remove the surplus height by combining the same in the top imaginary layer, thereby permitting the remaining portion of  
115 the body of butter to be divided into layers of equal height or thickness. To do this, the height or thickness of the layer being ordinarily greater than that for which the set-pin 37 and inclined bar 24 are designed to set the vari-  
120 able indicator 13, whereby the external taper to the butter is compensated for, other means has to be devised which will act with the set-pin 37 and in conjunction with bar 24 for moving the  
125 said bar 24 laterally to a greater degree than would be the position of the bar relatively to the set-pin when adjusted for compensating for the taper alone. Therefore I provide an auxiliary set mechanism embodying a wing  
130 40, pivoted to the bar 24 adjacent its upper



end and provided with a slot in which the stud 40', carried by the short arm of a bell-crank lever 41, is received. This lever 41 at the juncture of its arms is pivoted to bar 24, as at 41', and the long arm of this lever projects through a slot in the frame 22, at which point it is formed with an elongated tooth 41'', adapted for engagement with the ratchet-teeth of the plate 42, secured to the carrier 31. Thus when the carrier 31 is elevated to such height that the teeth of its plate 42 strike the tooth 41'' the projecting end of lever 41 will be elevated. Acting in conjunction with this lever 41 is a gage which embodies an approximately U-shaped body portion, as 52, illustrated as being formed of wire and having at its upper ends two angular extensions, one of which is the gage-arm 51 and the other, 53, having rigidly secured thereto a plate 54, carrying a pin 55, which normally bears on the upper edge of the long arm of said bell-crank lever. Thus when said lever is elevated the gage 52 is also raised and its angular arm 51 thereby elevated so that it will lie above the top of the body of butter when placed on the platform. The upward movement of the long arm of the bell-crank lever by reason of its slotted connection with the wing 40 and pivoted connection with the bar 24 swings said wing in the direction of the arrow (see Fig. 5) until it abuts the set-pin, and pressure still being exerted on said wing by the further raising of the projecting end of the long arm of the bell-crank lever 41 and by reason of its pivoted connection to the bar 24 said bar will be forced laterally to move the indicator 13. By providing the U-shaped form of gage-body which is conveniently slidably supported in a hanger 52' and lug 52'' and having the same of the length indicated the carrier 31, which projects there-through, can be readily raised and lowered without meeting any obstructing parts. After the carrier 31 has been elevated and the body of butter set on the platform the projecting end of the long arm of bell-crank lever 41 is then given a lateral pull to disengage its tooth 41'' from the ratchet-teeth of said plate 42, and then the said arm of the lever 41 is lowered until the gage-arm 51 of the gage-body 52 rests on the top of the body of butter, which operation will permit of the spring 21 moving the indicator 13 relatively to the indicator 15 to indicate the movement of the handle 7 in order to compensate for the increased thickness of the blocks to be cut from the top layer.

43 is a horizontally-disposed frame or support hinged to the carrier for vertical swinging movement and carrying a horizontally-swinging cutter-frame 43', pivoted concentrically to the rotating platform and embodying a rigid top cross-bar extending into a handle part and an outer depending end bar formed integral therewith.

As a support for the cutter-wire I provide an inclined thin flat finger 44, which depends from the frame 43 and has its lower end apertured and disposed in vertical alinement with the pivot of the cutter-frame.

The cutter-wire 45 is secured at one end to the pivot of the cutter-frame and extends downwardly through the aperture of finger 44 and then across to a tension device 45', secured to the end bar of said frame.

46 indicates a notched upright secured to the base 1 at a point opposite the frame 22, and on this upright I mount a guide-track 47 for supporting the cutter during its horizontal swinging movement. This track is provided with clips 48, which loosely receive the upright 46 and one of which is forced into the notches of the upright by a spring, as 48', whereby the position of the track can be correspondingly altered when the frame or support 43 and the carrier 31 are raised and lowered.

In operation the carrier 31 being elevated the body of butter which normally rests on disk 49 is lifted with said disk and placed on the rotary platform, and in order to insure the concentric relation of the disk to the platform and cutter I provide the disk on its under face with a segmental flange 50, which is adapted to abut and conform to the curvature of the outer edge of the platform. The gage 52 is then lowered until its arm 51 rests on the top of the body of butter and then the cutting operation commenced by swinging the support 43 downwardly until the depending end bar of the cutter-frame engages the track 47, and thereby making a vertical incision of predetermined depth in the body of butter, the outer portion of the cutter-frame being braced during this movement by the stud 56 of said support engaging aperture 57 of the cutter-frame. The support 43 is now swung upwardly to disengage the cutter from the butter, and the platform is then rotated by the handle 7, after which the cutter is again swung downwardly to make a second incision in the body of butter. The blocks of butter to be severed being segmental in shape it will be apparent that by producing these two radial slits the sides of the block to be cut have been severed from the main body of butter, and to complete the operation it is merely necessary to produce a horizontal slit which connects the lower ends of the first two slits. This is accomplished by swinging the cutter-frame on its pivot independently of the frame or support 43. This operation is continued after the formation of the horizontal slit by elevating the frame or support 43 with the cutter and then again rotating the platform a predetermined distance, then again lowering the frame or support 43, so that a vertical incision is again produced, and then the cutter-frame is swung independently to produce the horizontal slit, whereby the second block



is cut. This operation is continued until all of the blocks capable of being formed with the cutter cutting only to a certain depth are successively produced, and in reality a layer  
5 of butter is removed from the top of the butter body. Then the carrier 31 is lowered until the tongues 33' of its retaining means engage in the next lower notches of the frame-flanges 23. Then a second layer of butter is passed  
10 through a similar dividing operation.

Of course the operation of providing two vertical slits in the body of butter, as set forth in the foregoing, is only necessary when removing the first block of each layer, as in the  
15 subsequent cutting operations one side of each succeeding block is always free. (See Fig. 2.)

As the carrier 31 is lowered and by reason of the tapered shape of the body of butter the weight of the blocks in the lower series would  
20 be greater than the preceding ones unless means was provided to make allowance for this external increase of material, and to obviate this difficulty I have devised the primary set mechanism heretofore referred to, which  
25 acts by reason of the set-pin 37 bearing on the edge of the inclined bar 24 and moving with said carrier in a straight vertical plane and forcing said bar laterally, so that the indicator 13 is moved by successive steps toward  
30 the fixed indicator 15, thereby decreasing the space therebetween, and consequently limiting the movement of handle 7. As the movement of the handle is restricted more upon each lowering operation of the carrier 31, the  
35 gradual increase of the length of the blocks is thus compensated for.

In the foregoing I have described merely the operation of the handle as being moved to the limit of its movement upon each operation thereof. This, however, is not absolutely  
40 necessary, as smaller-sized blocks can be produced by moving the handle 7 but a portion of its path of travel and then operating the cutter, as stated, and as the intermediate indicator always indicates the central point in  
45 the path of travel between the movable and fixed indicators 13 and 15, respectively, the apparent weight of such various sizes of blocks can be readily determined when working upon  
50 a fixed scale.

After the entire body of butter has been divided the carrier 31 is elevated to permit of a new body of butter being placed on the platform, and the cutting operation is then repeated as before.  
55

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

1. In a machine for cutting butter, in combination with a vertically-swinging support, a  
60 cutter hinged thereto for an angular swing independent thereof, said cutter having vertical and horizontal cutting edges, the vertical edge being in alinement with the point of  
65 swing.

2. In a machine for cutting butter, in combination with a support, a cutter-frame hinged thereto, and a cutting-wire having one end secured to the outer end of the frame and a portion of its length held by the support in  
70 line with the point of swing of the frame.

3. In a machine for cutting butter, in combination with a support, a cutter-frame having a hinged connection therewith, a depending stationary finger secured to the support,  
75 and a wire engaging said finger and having one end secured at a point in alinement with the inner portion of the cutter-frame and the other end secured to the outer portion of said frame.  
80

4. In a machine for cutting butter, in combination with a support, a cutter-frame hinged thereto and being provided with a cutter, and a depending finger secured to the support,  
85 said cutter being secured to said frame and engaged at an intermediate point with said finger.

5. In a machine for cutting butter, a cutter comprising a frame, and a cutter-wire disposed to form a plurality of cutting edges extending at an angle to each other, in combination with a means for supporting the wire  
90 at the point of angle.

6. In a machine for cutting butter, a support, a swinging cutter-frame hinged thereon, a relatively fixed inclined finger having  
95 its lower end in line with the point of swing of said frame, and a wire engaged with the lower end of said finger and having one end secured at the point of swing and the other to the outer portion of said frame.  
100

7. In a machine for cutting butter, in combination with a support, a cutter-frame embodying a top bar hinged at one end to said support, and a depending bar secured to the  
105 other end of said top bar, a cutter-wire having angularly-disposed cutting edges, and means carried by said support for supporting the wire at the point of angle.

8. In a machine for cutting butter, in combination, a rotary platform, a vertically-movable support arranged thereabove, and a cutter of open form hinged to said support and  
110 having vertical and horizontal cutting edges, the vertical edge being in alinement with the center of the platform.  
115

9. In a machine for cutting butter, a perpendicular frame, a carrier slidably supported thereon, a support mounted on said carrier for independent vertical movement, and a  
120 swinging cutter connected with said support, in combination with a rotary platform having its center in alinement with the inner edge of said cutter.

10. In a machine for cutting butter, in combination, an adjustable cutter, a movable platform, means for moving the same, an indicator for indicating the movement of said platform relative to the adjustment of the cutter,  
125 and means for moving said indicator as the cutter is adjusted.  
130



11. In a machine for cutting butter, in combination with a vertically-adjustable cutter, an intermittently-rotated means underlying the same, means for rotating the said means, 5 an indicator for determining the movement of said means, and means for moving said indicator as the cutter is adjusted.

12. In a machine for cutting butter, in combination, a rotary platform, a cutter spaced 10 from the platform and movable in concentric relation thereto, means whereby the space between said cutter and platform is varied, an operating-handle for moving said platform, and means to indicate the variations of the 15 movement of said handle relative to the position of the cutter to the platform.

13. In a machine for cutting butter, a rotary platform, a handle for moving the same, an indicator means for controlling the throw 20 of said handle, a cutter adjustable to and from the platform, and means whereby the indicator means is adjusted when the cutter is thus adjusted.

14. In a machine for cutting butter, a rotary platform, a cutter adjustable to and from 25 the platform, means whereby the platform is rotated, indicators disposed on opposite sides of said means, and means for adjusting one indicator to and from the other as the cutter 30 is adjusted.

15. In a machine for cutting butter, a platform mounted for rotation, a movable handle, means whereby the platform moves with 35 said handle in one direction, said handle moving independently of the platform in the reverse direction, a cutter adjustable to and from the platform, and means adjustable simultaneously with the cutter as adjusted for 40 indicating variations in the maximum throw of the handle.

16. In a machine for cutting butter, in combination, a perpendicular frame, a carrier adjustable longitudinally thereof, a support movable with said carrier, a cutter carried by said 45 support and having a movement independent thereof, and an adjustable track for supporting the free end of said cutter during its independent movement.

17. In a machine for cutting butter, in combination with a support, a cutter hinged at its 50 inner end thereto, and a track for supporting the outer end of said cutter during its swinging movement.

18. In a machine for cutting butter, in combination, a support and a track adjustable in 55 similar planes, a cutter carried by said support and movable independently thereof, said cutter during its independent movement bearing on said track.

19. In a machine for cutting butter, in combination with a rotary platform, a support movable to and from the platform and extending thereacross and normally lying parallel 60 thereto, and a cutter having a hinged connection with said support whereby it is capable

of an independent movement, said hinged connection being in alinement with the center of the platform.

20. In a machine for cutting butter, in combination with a rotary platform, a support extending thereacross and being mounted for a 70 swinging movement to and from the platform, and a cutter hinged to said support at a point in alinement with the center of the platform, whereby it can be swung independently of the 75 support.

21. In a machine for cutting butter, in combination with a perpendicular frame, and an upright, a platform movable therebetween, a support adjustably mounted on said frame, a 80 cutter on said support having a swinging movement independent thereof, and an adjustable track on said upright for supporting the free end of said cutter during its independent movement. 85

22. In a machine for cutting butter, in combination with a rotary platform, a handle for moving the same, an adjustable cutter mounted for vertical and horizontal cutting, and means 90 whereby the throw of said handle is varied at different adjustments of the cutter.

23. In a machine for cutting butter, in combination with a rotary platform, a cutter adjustable to and from the platform, a handle for moving said platform, an indicator for indicating 95 the maximum throw of said handle, means whereby said indicator is adjusted by the adjustment of the cutter, and means for manually setting said indicator to vary the maximum throw of said handle. 100

24. In a machine for cutting butter, in combination with a rotary platform, a handle for operating the same, an adjustable cutter, indicating means acting in conjunction with the 105 cutter as adjusted for varying the maximum throw of the handle, and a means adjustable independently of the cutter for adjusting said indicating means.

25. In a machine for cutting butter, in combination, a rotary platform, a cutter adjustable to and from the same, an operating-handle for said platform, an indicating means for 110 indicating the maximum throw of said handle, a set mechanism acting in conjunction with the cutter as adjusted for varying the set of the indicating means, and an auxiliary set 115 mechanism operating in conjunction with the first-named set mechanism to adjust the position thereof when the cutter is in a predetermined position. 120

26. In a machine for cutting butter, a movable platform, means for indicating the movement thereof, a movable carrier, a cutter movable with said carrier, a set mechanism operatively connected to said means for moving 125 the same, and means movable with said carrier for operating said set mechanism.

27. In a machine for cutting butter, a movable indicator, an adjustable carrier, and a set 130 mechanism for operating said indicator con-



trolled from said carrier, in combination with a cutter movable with said carrier, a rotatable platform, and means for rotating said platform, the movement of said last-named means  
5 being controlled by said indicator.

28. In a machine for cutting butter, a movable platform, a carrier adjustable to and from the platform, means for moving the platform, a movable indicator for indicating the movement of said means as the carrier is adjusted,  
10 a set mechanism operatively connected to said indicator, means disposed on the carrier for actuating said set mechanism as the carrier is adjusted and a manually-operative set mechanism connected to said first-named set mechanism for adjustment thereof and being adapted to cooperate with said means.  
15

29. In a machine for cutting butter, in combination, a rotary platform, an operating-handle therefor, an indicating means for indicating the maximum throw of said handle, a movable carrier, a cutter carried thereby, a means for adjusting said indicating means, means for controlling said last-named means from the carrier, and means independent of said indicator-adjusting means acting in conjunction with said last-named means for increasing the movement of said indicator at a predetermined point in the travel of said carrier.  
20

30. In a machine for cutting butter, a set mechanism, a movable carrier, a cutter mounted on the carrier, an adjustable means for controlling said set mechanism from the carrier, in combination with a rotary platform, an operating-handle therefor, and an indicating means acting in conjunction with said handle and being operated by said set mechanism.  
25

31. In a machine for cutting butter, a movable carrier, a set mechanism operated by the carrier during its movement in one direction and adjustable independently thereof in the reverse direction, a gage for determining the set of said set mechanism, and means supported on the carrier acting in conjunction with said set mechanism, in combination with an indicator controlled by said set mechanism.  
30

32. In a machine for cutting butter, in combination with a rotary platform, an operating-handle therefor, and a movable indicator acting in conjunction with said handle, a carrier adjustable to and from the platform, a cutting means mounted on the carrier, means for effecting a uniform adjustment of said indicator by the adjustment of the carrier, and means for varying the uniform adjustment of the indicator at a predetermined point of travel of the carrier.  
35

33. In a machine for cutting butter, a set mechanism, a movable carrier, a cutter mounted thereon, a platform underlying the carrier, means for moving the platform, a movable indicator for indicating the movement of said platform as the carrier is moved, said indicator being connected to said set mechanism,  
40 a set-pin supported on the carrier for directly

operating said set mechanism during a portion of the travel of the carrier, adjustable means acting in conjunction with said set-pin for moving said set mechanism during the remaining portion of the travel of the carrier, and means whereby the set mechanism is automatically reset to its normal position when said set-pin moves out of engagement with said adjustable means.  
70

34. In a machine for cutting butter, a primary set mechanism and an auxiliary set mechanism operatively connected to, and disposed at one end thereof, a movable platform, a carrier adjustable to and from the platform, means for moving the platform, a movable indicator connected to the primary set mechanism, means supported on the carrier for adjusting said primary set mechanism as the carrier is adjusted, and being related to said auxiliary mechanism for varying the adjustment of the primary set mechanism, and means for returning said primary set mechanism to its normal set when said adjusting means passes out of operative relation to the auxiliary set mechanism.  
75

35. In a machine for cutting butter, in combination, an adjustable carrier, a cutter mounted thereon, a movable platform beneath the cutter, means for moving the same, a bar movable laterally of the carrier, means mounted on the carrier for moving said bar when the carrier is adjusted, and an indicator actuated by said bar for indicating the movement of the platform-moving means.  
80

36. In a machine for cutting butter, an adjustable carrier, a rotary platform beneath the same, means for moving the platform, a cutter mounted on the carrier, an inclined bar movable laterally of the carrier, means for adjusting the inclination of said bar, means mounted on the carrier for moving said bar, and an indicator actuated by said bar for indicating the movement of said platform-moving means.  
85

37. In a machine for cutting butter, an adjustable carrier, a movable bar arranged in juxtaposition thereto, a pin on the carrier engaging said bar for effecting the movement thereof when the carrier is adjusted, and an indicator actuated by said bar, in combination with a platform disposed beneath the carrier, a cutter mounted on said carrier, and a handle for moving said platform, the movement of said handle being indicated by said indicator.  
90

38. In a machine for cutting butter, an adjustable carrier, a rotary platform beneath the same, a movable handle for operating the same, a bar movable laterally of the platform, a pin on said carrier engaged with said bar for moving the same, means for adjusting said pin laterally of the carrier, and an indicator actuated by said bar for indicating the throw of said handle.  
95

39. In a machine for cutting butter, in combination with a rotary platform and a handle for moving the same, a movable indicator for  
100



indicating the throw of the handle, an adjustable carrier having a cutter mounted thereon, a bar operatively related to said indicator for moving the same and being movable laterally of the carrier, and means mounted on the carrier for moving said bar:

40. In a machine for cutting butter, a pair of indicators, one of which is movable relatively to the other, an adjustable carrier, an inclined movable bar for adjusting the movable indicator, and means mounted on the carrier for moving said bar when the carrier is adjusted in combination with a rotary platform, a handle for moving the platform, said handle extending between the indicators, and a cutter carried by the carrier.

41. In a machine for cutting butter, in combination with a movable platform, and a means for operating the same, a movable indicator for indicating the throw of said platform-moving means, an adjustable carrier, a cutter carried thereby, a bar movable laterally of the carrier and being operatively connected to said indicator for moving the same, a means mounted on the carrier for moving said bar, a wing pivoted to said bar for engagement with said means, means for adjusting said wing, and means for holding said wing in adjusted position.

42. In a machine for cutting butter, in combination with a movable platform, and a handle for operating the same, a movable indicator for indicating the movement of said handle, an adjustable carrier, a cutter mounted on the carrier, a movable bar for adjusting said indicator, a pin on the carrier, means for adjusting said bar relatively to the line of movement of the carrier, means for adjusting said pin, a wing pivoted to said bar for engagement with said pin, means for swinging said wing, a gage movable with said last means, and means for holding said last-named means in its adjusted position.

43. In a machine for cutting butter, in combination with a movable platform and a handle for operating the same, a movable indicator for indicating the throw of the handle, a movable bar, and means for setting the indicator embodying a wing pivoted to said bar, a means for swinging said wing, and a gage movable with said last-named means, in combination with an adjustable carrier and a means mounted on said carrier for engagement with said bar and wing respectively.

44. In a machine for cutting butter, in combination, a movable platform, means for mov-

ing the same, and an indicator for indicating the throw of said means, a set mechanism for moving said indicator, a gage for determining the set of said set mechanism, said gage having an open body, an adjustable carrier projecting therethrough and a cutter mounted on said carrier.

45. In a machine for cutting butter, in combination, a movable platform, means for moving the same, an indicator for indicating the throw of said means, a set mechanism for moving said indicator, a gage for determining the set of said set mechanism, said gage having an approximately U-shaped body, and an outwardly-projecting arm secured thereto, an adjustable carrier projecting therethrough and a cutter mounted on said carrier.

46. In a machine for cutting butter, in combination with a movable platform and a handle for moving the same, a movable indicator for indicating the throw of the handle, a movable bar operatively connected thereto, a wing hinged to said bar, a lever operatively connected to said wing for swinging the same, and means for holding said lever in its adjusted position, in combination with an adjustable carrier, a pin mounted thereon for engagement with said bar and wing respectively for moving said bar, and a gage movable with said lever for indicating the movement thereof and being provided with a horizontally-projecting arm.

47. In a machine for cutting butter, a movable platform, a movable indicator for indicating the movement of the platform, a set mechanism operatively connected to the indicator, means for adjusting said set mechanism, and a gage movable with said means for determining the set of the set mechanism.

48. In a machine for cutting butter, a rotary platform, a handle for operating the same, a fixed indicator, a pair of pivoted arms, indicators mounted on the outer ends of said arms, said handle being disposed between the outer movable and stationary indicator, a pair of links having their inner ends slidably connected to the inner of said arms, and one link having its outer end connected to the outer movable indicator-arm, and the outer end of the other link engaging a fixed pivot.

Signed at Seattle, Washington, this 16th day of May, 1904.

CHARLES P. ROSS.

Witnesses:

ERNEST B. HERALD,  
EDWARD M. WARNER.