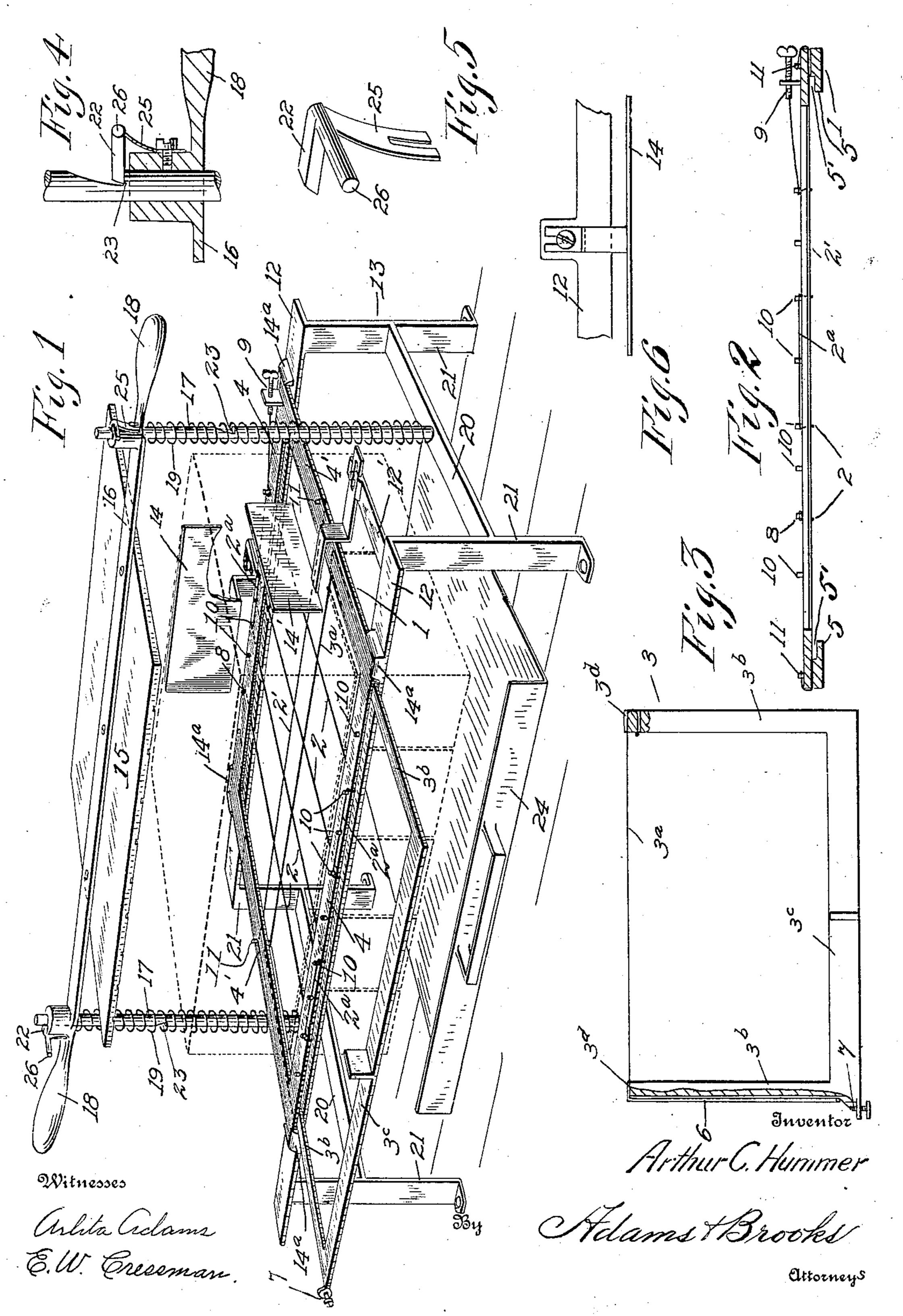
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BUTTER CUTTER.

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UNITED STATES PATENT OFFICE.

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BUTTER-CUTTER.

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To all whom it may concern:

Be it known that I, Arthur C. Hummer, 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 apparatus for dividing bodies of butter and has for one of its objects the provision of a comparatively simple construction, embodying essential features of adaptability, utility and general efficiency.

With the above and other objects in view, to be referred to as the description progresses, the invention resides in the construction, arrangement and combination of parts hereinafter described and succinctly defined in the appended claims.

Referring now to the accompanying drawing, in which like numerals of reference indicate like parts throughout: Figure 1 is a view in perspective of my invention illustrating by dotted lines a body of butter which has been forced through the cutter frame so that vertical cuts are provided to a point substantially midway of its height, and showing the cutter for producing 25 the horizontal cut moved part way through the body of butter. Fig. 2 is a vertical sectional view of the frame which supports the cutter for producing vertical cuts in the body of butter. Fig. 3 is a plan view of the cutter for producing horizontal cuts and the slide frame 30 to which it is secured, said slide frame being broken away for illustrating more clearly the arrangement of the cutter wire. Fig. 4 is a fragmentary view illustrating more particularly one of the dogs or stops on the support or bar to which the follower is secured engaged 35 with the shoulder of the upright. Fig. 5 is a view in perspective of one of the dogs or stops, and Fig. 6 is a plan view of a portion of the stand and one of the gages secured thereto.

In carrying out my invention I provide a relatively 40 stationary cutter frame 1 having cutter wires 2, 2', beneath which is slidably supported a second cutter frame 3 having a single cutter wire 3^a.

Cutter frame 1 comprises end and side bars 4, 4' respectively, the latter of which are provided at a point below cutter wires 2, 2' with guide flanges 5, formed by providing a groove 5' in the inner edge portions of said side bars, on which cutter frame 3 is slidably mounted.

Cutter frame 3 comprises side bars 3^b which are connected at one end by a cross bar 3^c, adapted to be grasped by the operator to slide the cutter frame. Cutter wire 3^a extends across the other end of this frame, being engaged in grooves 3^d in the adjacent end portions of side bars 3^b, and having one end portion arranged in a groove 6 in the outer edge of one of the bars 3^b and connected to a suitable tension device 7, consisting of a screw mounted in a threaded aperture of a

lug provided on cross bar 3°. The other end of cutter wire 3° is fixed to the other side bar 3° in any desired manner, a convenient method being illustrated in Fig. 3.

Cutter wires 2 are formed from a single length of wire, having one end secured to a pin 8 on frame 1 and its other end connected to a suitable tension device 9. To provide said cutter wires 2, the intermediate portion of said length of wire is bent back and forth across the cut- 65 ter frame the number of times desired, beneath end bars 4, and the connecting portion 2ª between each pair of cutter wires 2 engaged over a predetermined number of pins 10, provided on the upper face of end bars 4. As now illustrated, the connection portions 2a of the 70 cutter wires 2 are engaged over three pins 10, whereby a desirable spacing of the cutter wires is obtained. The connecting portions 2ª can however, be engaged over a greater or less number of pins 10 when it is desired to vary the spacing of cutter wires 2, as is obvious. Cutter 75 wire 2' passes over cutter wires 2 and projects through apertures in side bars 4' and has its end portions engaged over the outer edges of said bars and secured to pins 11, see Figs. 1 and 2.

Cutter frame 1 rests removably on top rails or bars 12, 80 of a supporting stand 13 with its corners engaged in angular lugs 14^a thereof said top rails or bars being sufficiently spaced to permit of the body of butter, to be divided, passing therebetween.

Reference numerals 14, 14' indicate adjustable gages 85 for centering the body of butter relatively to cutter frame 1, the former being secured to one of the top bars 12 and the latter to an arm 12' secured to and projecting inwardly from the other of said top bars.

Reference numeral 15 indicates a follower for forcing 90 the body of butter downwardly, the same being carried by a suitable supporting means consisting of a bar 16, slidably engaged on uprights 17, and provided with outwardly projecting handles 18. Springs 19, coiled about said uprights, serve to return the follower to its 95 elevated or normal position. Uprights 17 as now considered, are fixed to cross bars 20, fixed to legs 21 of the stand.

In operation, a body of butter is placed within cutter frame I so that it rests on cutter wires 2, 2' and the gages 100 then adjusted. Follower 15 is now lowered to force the body of butter downwardly through cutter frame 1 until vertical cuts are produced which extend to a point midway of the height or thickness of the body of butter, at which time dogs or stops 22 mounted on the supporting means of the follower engage shoulders 23 of uprights 17 and arrest further downward movement of the follower. Supporting means or bar 16 is now released whereupon it is elevated by springs 19. Cutter frame 3 is now forced inwardly and cutter wire 3° produces a 110 horizontal cut which intersects the vertical cuts produced by cutter wires 2, 2' thereby dividing the lower

portion of the body of butter into a plurality of sections which drop into a suitable tray 24. The dividing of the remainder of the body of butter is effected by merely forcing the same through the cutter frame, dogs or stops 22 being held away from shoulders 23 to allow the follower to lower sufficiently to carry out this operation.

Cutter frames 1 and 3 being constructed and arranged as specified can be readily removed when desired for the purpose of cleaning the same or heating the cutter wires so that they will make more well defined cuts in the body of butter. The follower is also preferably removable from upright 17 so that it can be cleaned and cooled to prevent the butter adhering thereto.

Dogs or stops 22 are formed integral with resilient stems 25 and are provided at one side with finger grips 26, through the medium of which dogs or stops can be withdrawn from engagement with shoulders 23, for the purpose hereinbefore set forth.

Having thus described my invention what I claim as new, and desire to secure by Letters Patent of the United States of America, is:—

- 1. A device of the type set forth comprising a cutter frame provided with a plurality of cutters, means to support said cutter frame, a tray beneath said cutter frame, and means for forcing said body of butter through said cutter frame supported thereabove for sliding movement toward and from the same.
- 2. A device of the type set forth comprising a cutter frame, a plurality of cutters secured thereto, a follower arranged above said cutter frame, means on which said follower is supported for sliding movement toward and from said cutter frame, releasable means for stopping and holding said follower against further movement when it has forced a body of butter a predetermined distance through said cutter frame, and a second cutter means movable across the path of movement of the body of butter, for the purpose specified.
 - 3. A device of the type set forth comprising a cutter frame, a plurality of cutters secured thereto, a follower arranged above said cutter frame, uprights on which said follower is slidably supported for movement toward and

from said cutter frame, said uprights being provided with shoulders at a point above said cutter frame, spring pressed dogs on said follower for engagement with the 45 shoulders on said uprights, and a second cutter movable across the path of movement of the body of butter.

4. A device of the type set forth comprising a stand, an open cutter frame removably supported on the top of said stand, cutter means on said cutter frame, a second cutter frame slidably mounted on said first named cutter frame for movement thereacross, a cutter means on said last named cutter frame, and a follower for forcing a body of butter through said first named cutter frame, for the purpose specified.

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5. A device of the type set forth comprising a stand, an open frame removably supported thereon, cutters secured to and extending across said frame, a second frame slidably supported on said first named frame for movement across the path of movement of the body of butter and being provided with cutter means, and a follower slidably supported above said cutter frames for movement toward and from the same, for the purpose specified.

6. A device of the type set forth comprising a supporting stand, an open frame removably supported on said 65 stand and provided with a plurality of cutters, lugs on said stand preventing displacement of said frame, and means slidably supported above said frame for forcing a body of butter therethrough, for the purpose specified.

7. A device of the type set forth comprising a supporting stand, a cutter frame composed of spaced side and end bars removably supported on said stand, there being angular lugs on said stand with which the corners of said frame are engaged, cutters extending across said frame, and a follower slidably supported for forcing a body of butter through said cutter frame, for the purpose specified.

8. A device of the type set forth comprising a supporting stand, an open cutter frame provided with cutter and having side bars formed with flanges, a second cutter frame slidably supported on the flanges of said first named cutter frame and provided with a cutter arranged to produce a cut extending at an angle to the cuts produced by the cutters on said first named cutter frame, and a follower for forcing a body of butter through said first named cutter frame.

Signed at Seattle, Washington this 3 day of April 1907.

ARTHUR C. HUMMER.

Witnesses:

C. H. WINDERS, ARLITA ADAMS.