L. B. LARSEN.

BUTTER CUTTER.

APPLICATION FILED MAR. 20, 1912.

1,045,988.

Patented Dec. 3, 1912.

2 SHEETS—SHEET 1.

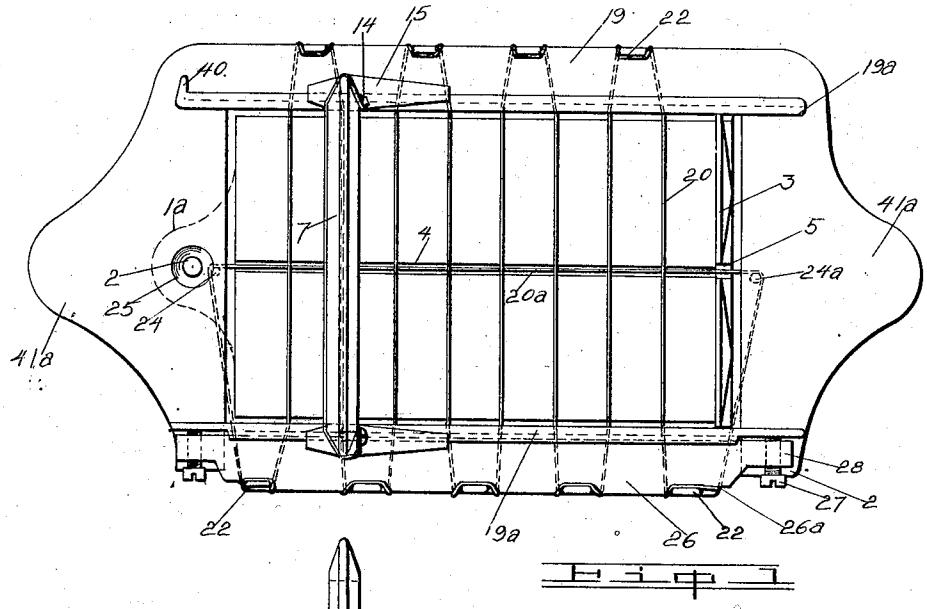

Fig. 1.

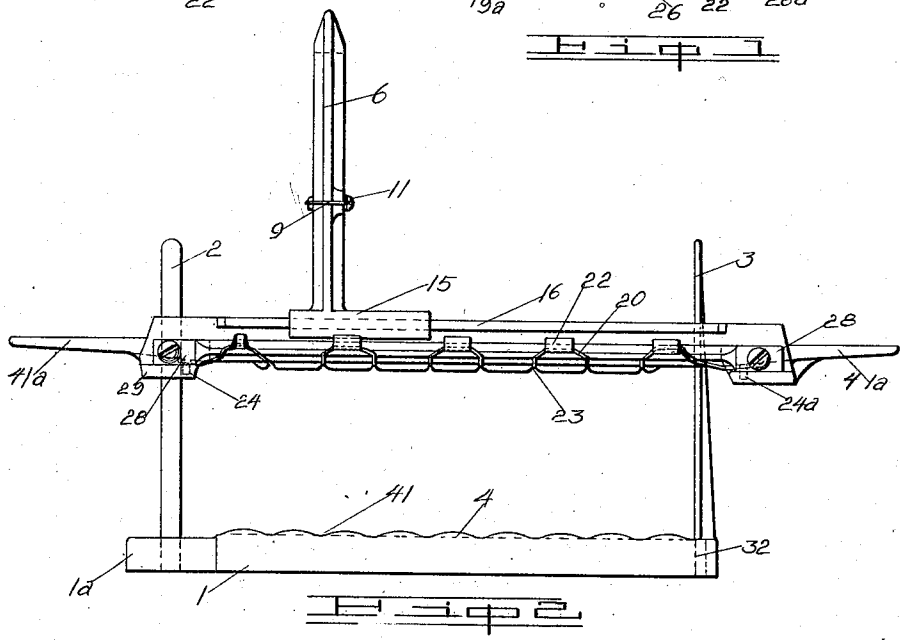

Fig. 2.

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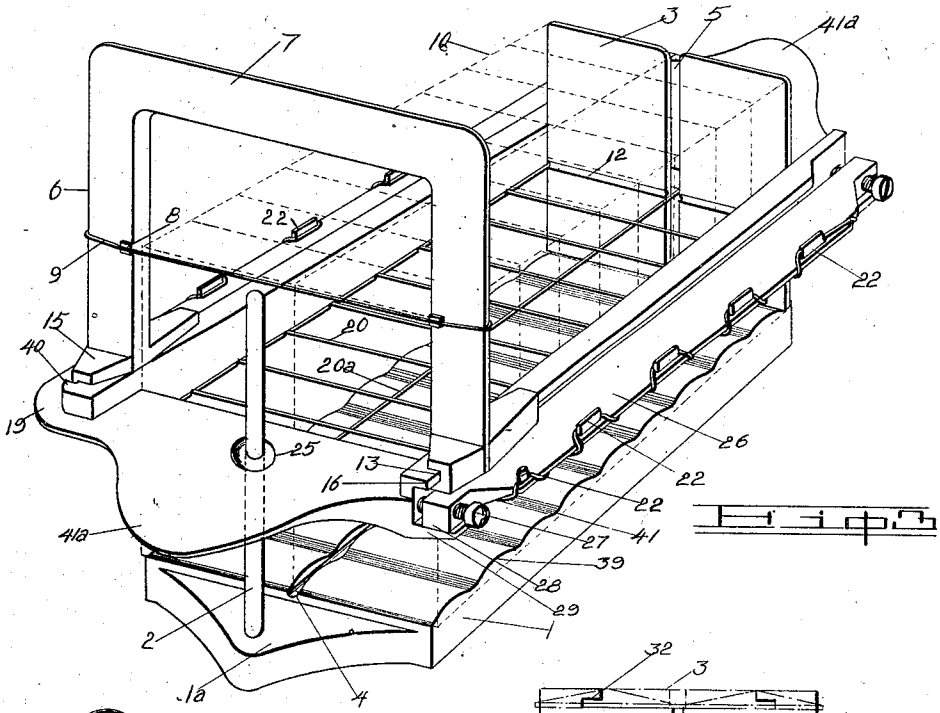

Fig. 5.

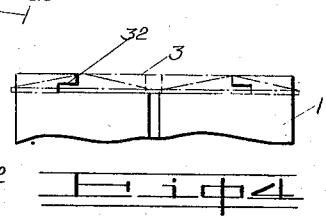

Fig. 4.

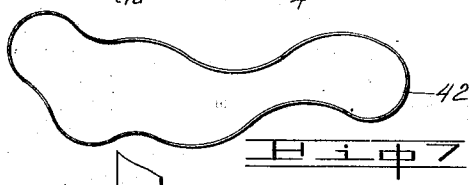

Fig. 7.

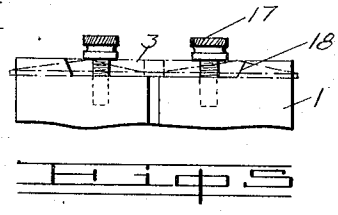

Fig. 3.

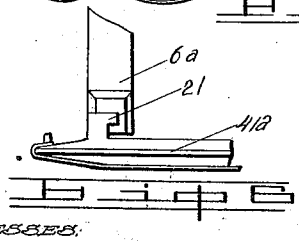

Fig. 6.

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UNITED STATES PATENT OFFICE.

LUDWIG B. LARSEN, OF PORTLAND, OREGON.

BUTTER-CUTTER.

1,045,988. Specification of Letters Patent. Patented Dec. 3, 1912.

Application filed March 20, 1912. Serial No. 685,076.

To all whom it may concern:

Be it known that I, LUDWIG B. LARSEN, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Butter-Cutters, of which the following is a specification.

The present invention relates to improvements in butter-cutters, and has for its object to provide a device which will quickly and easily sever the usual commercial brick of butter into small blocks suitable for individual table use.

A further object is to provide a device of the character indicated which is easily operated, effective for the purpose designed and which can be produced at a reasonable cost.

I accomplish the objects indicated by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the complete device, in which both the transverse and longitudinal vertical cutting wires are clearly shown. Fig. 2 is a side elevation of same. Fig. 3 is a perspective elevation, in which the horizontal longitudinal-cutting member is shown in detail. Fig. 4 is a detail of an end guide plate mounted in the base. Fig. 5 shows a two-part guide plate secured by retaining screws. Fig. 6 shows an inside groove for the shoe of the horizontal cutter frame. Fig. 7 shows a loop or ring of wire adapted to be strung upon the cutter frame to form the cutting elements.

Referring to the drawings in detail, 1 represents a base, conforming in outline to that of the usual brick of butter, in the market. The base is cast in a single piece, preferably of aluminum, though it may be stamped from sheet metal. The forward end of the base is extended at the central portion, to form the support 1^a for the guide standard 2. In the rear end of the base is secured a guide plate 3, conforming to the transverse dimension of the brick. Along the longitudinal center of the base is formed a groove 4, and in line therewith, in the plate 3, is formed a slot 5, which extends to the bottom of said groove.

6 is a cutter frame having the end limbs equal to the height of the brick of butter, and united at their upper ends by the transverse member 7.

8 are notched lugs secured at a point on the frame, conforming to the vertical center of the brick to receive the cutting wire 9, which is firmly secured thereto upon the pin 14, and the screw 11. This arrangement of the wire permits it to stand against the end of brick while the latter is encompassed by the frame 6.

19 represents a vertical-cutter frame having integral side and end limbs. Upon the inner edge of each side limb is formed a rib 19^a, each having a lateral flange 16, which is received by the groove 13 in the inner face of the respective shoes 15 formed on the lower ends of the end limbs of the cutter frame 6

Upon the outer face of one side member of the vertical-cutter frame are formed two or more depending lugs 29, which support the tension bar 26, in the plane of the frame. Along the outer edge of the tension bar, and also along the outer edge of the opposite side limb are formed vertical lugs 22, comporting in width to the thickness of the blocks to be cut. In the lower faces of the side members are formed notches 23, to receive the cutter wires, engaged on said lugs, and they are spaced apart so as to divide the brick into a predetermined number of blocks of equal thickness.

The wire loop 42, which is made of a size to permit it to be easily placed upon the retaining lugs when the bar 26 is in reduced position, will be strung transversely thereon, beginning at one end and continuing back and forth to the opposite end, the strands, thus engaged forming the transverse cutters 20. The remaining portion of the loop will then be drawn to the longitudinal center of the frame and engaged upon the depending lugs 24 and 24^a, to form the longitudinal vertical cutter 20^a. Each end of the bar 26 is reduced at 28 and provided with an aperture adapted to receive the adjusting screw 27. By turning down these screws the bar will be retracted, and the wire, which is made preferably of piano steel, will be drawn taut, so that each section will sever the butter in a smooth, straight line. Each end of the cutter frame is extended, as at 41^a, to form suitable hand holds for its manipulation.

In operation, the brick 10 will be placed upon the base, against the end guide plate 3. The shoes 15 of the horizontal longitudinal-cutter frame will be engaged upon

the guide ribs 16 of the cutter frame and advanced to the forward end against the stop 40. The cutter frame will then be engaged upon the standard 2, in the central aperture 25 in the forward end limb, and then pressed down over the guide plate 3, which fits loosely therein. The longitudinal cutter 20ª passes down in the slot 5 and into the groove 4 of the base. The upper surface of the base has a sinuous outline, so that the brick will rest upon the elevations 39 thereof; and the depressions 41 are so disposed as to receive the transverse cutter 20, their gradual curvature facilitating the entrance of the wire therein. In this manner the cutters will pass entirely through the brick leaving the edges cut smooth. The vertical operation having been completed the frame 6 will be drawn to the rear upon the guide flanges 16, and passing over the guide plate 3, the wire 9 will emerge from the brick and enter the groove 12 of plate 3, leaving the individual blocks ready to be served.

In Fig. 5 is shown a slight modification in which the guide plate is composed of two members 18, each held in the base by a set screw 17.

A further slight modification is shown in Fig. 6, in which the slide shoe is formed in the inner sides of the end members 6ª of the sliding frame, to engage the inwardly protecting flange 21, of the cutter frame.

By the construction I have shown the parts may all be cast and the device completed without the use of machine work.

Having described my invention, what I claim is:

1. In a device of the character described, a rectangular base, a guide standard in the front end thereof, guide plates secured across the rear end thereof, a frame conforming to said base, a rib along the upper face of each side member of the frame, a lateral flange formed on each rib, a stop at the front end of one end of said ribs and a slide frame engaged in said flanges and adapted to reciprocate between said stop and said guide plates.

2. In a device of the character described, a rectangular base, a guide standard in the front end thereof, a guide plate having a central vertical slot, detachably secured across the rear end of the base, a vertical cutter-frame conforming to said base, adapted to reciprocate vertically on the said standard and to encompass said guide plate, a slide-way formed on the upper face of each side member of said frame, a slide frame reciprocating therein, a horizontal cutting element secured on the slide frame, an adjustable bar, mounted upon the first mentioned frame, a vertical cutting wire mounted on the frame and bar and means for adjusting the bar to tighten the wire.

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

LUDWIG B. LARSEN.

Witnesses:
HENRY MCCONAUGHY,
L. J. TYSON.