Dec. 7, 1926. 1,609,528

P. THIEME

APPARATUS FOR CUTTING LARGE BUTTER BLOCKS INTO SMALL PIECES

Filed March 11, 1926

Fig. 1.

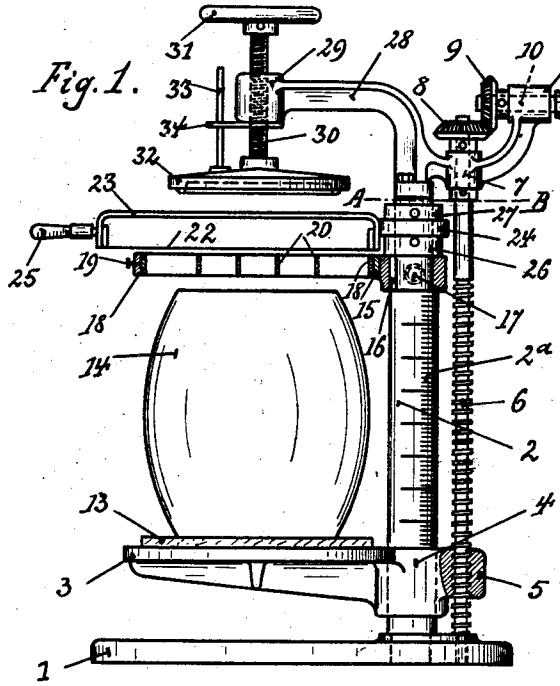


Fig. 4.

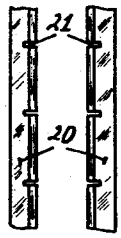


Fig. 5.

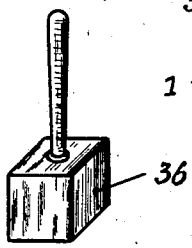


Fig. 6.

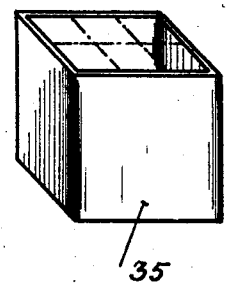


Fig. 2.

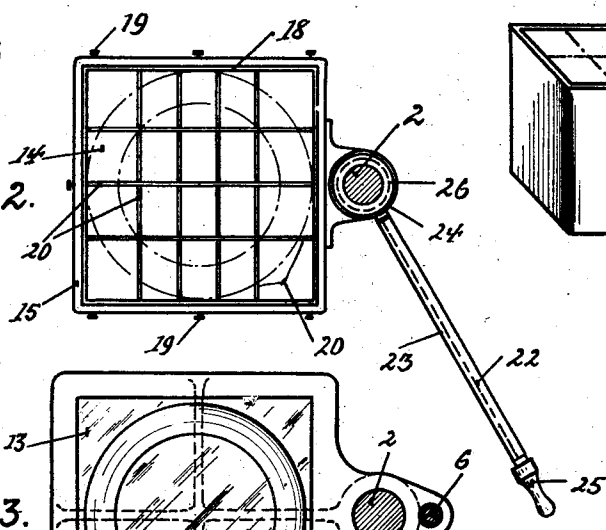
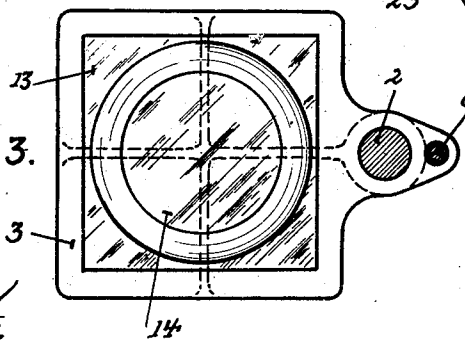


Fig. 3.



Witnesses:

J. H. Stephens

E. Pulz

Inventor:

Paul Thieme

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UNITED STATES PATENT OFFICE.

PAUL THIEME, OF LEIPZIG, GERMANY.

APPARATUS FOR CUTTING LARGE BUTTER BLOCKS INTO SMALL PIECES.

Application filed March 11, 1926, Serial No. 93,921, and in Germany March 30, 1925.

This invention relates to an improved apparatus for cutting large butter blocks into small handy pieces of a predetermined weight.

The accompanying drawing illustrates the improved apparatus: Fig. 1 is a side view of the same, partly in section, Fig. 2 is a plan view of a detail thereof, Fig. 3 is a plan view of another detail thereof, Fig. 4 shows a further detail, and Figs. 5 and 6 show two accessories preferably used in connection with the improved apparatus.

The base plate 1 carries a standard 2 on which a support 3 is slidably mounted by means of a boss 4. Said support has an integral nut 5 thereon in which screws a spindle 6 mounted with its lower end in said base plate 1 and with its upper end in a bracket 7 fixed to the top end of the standard 2. The upper end of said spindle carries a fixed bevel-wheel 8 which is in gear with another bevel-wheel 9, of which the axle 10 is turnably mounted in a lug 11 of the bracket 7 and fitted at its end with a crank-handle 12. By turning said handle, thus, the support 3 can be moved up and down the standard 2. The support carries a board 13 and serves for the reception of the butter block 14 thereon.

Above said butter block 14, a stationary cutter frame 15 is mounted on a reduced part of the standard 2 and prevented from turning thereon by means of a key 16 and from axial displacement thereon by means of a set-screw 17. Said cutter frame 15 carries a removable insertion 18, which can be fixed in position therein by means of screws 19. Said insertion consists of cross-wise arranged cutters 20 for cutting rectangular butter pieces, or of circular cutters for cutting round butter pieces. Said crosswise arranged cutters preferably engage each other by means of slots 21 therein.

Above the cutter frame 15, a cutting wire 22 is arranged on a bow 23, which is turnably mounted by means of a boss 24 on the standard 2, set-rings 26 and 27 being located on said standard below and above said boss 24 so as to adjust thereby the position of height of said bow and thus of the cutting wire 22.

The standard is preferably provided with a graduated scale 2^a, whereby the required extent of raising the support 3 can be exactly determined.

Whereas the cutter frame 15 serves for cutting the butter block in vertical direction, the cutting wire 22 serves to cut the same in horizontal direction, its adjustment being required for attaining a cutting height corresponding exactly to the desired size or weight of the pieces to be cut.

The standard carries further a bracket 28 integral with the bracket 7 and having a lug 29 in which a screw-spindle 30 is mounted. Said spindle carries a fixed top wheel 31 and a pressure-disc 32 loosely mounted thereon and prevented from turning with the screw-spindle by means of a pin 33 thereon engaging in a hole of a projection 34 fixed to the lug 29.

Said pressure-disc 32 has on its underside patterns or the like for providing therewith the cut butter pieces.

The waste butter falling off from the cut pieces is collected in a separate box 35 and pressed therein by means of a ram 36 to form a fresh butter block which can be cut into pieces by means of the improved apparatus.

The improved apparatus can also be used for cutting any other blocks, for instance of lard, soap, or the like, into pieces.

The operation is as follows:—First, the cutting wire 22 is turned aside (Fig. 2) and by turning the hand-crank 12 the butter block 14 is raised until its top part is vertically cut by the stationary cutter frame 15 and projects beyond the latter to the desired height determined by the scale 2^a on the standard 2. Then, the pattern disc 32 is pressed onto the upper surface of the butter block, whereby the patterns are provided in the vertically cut pieces, the pattern disc being then again moved upwards. Finally, the cutting wire 22 is passed through the projecting top end of the butter block, whereby the pieces are readily cut, which are then removed from the butter block. The operation is repeated until the whole block 14 has been cut into pieces.

By a removal of the insertion 18 from the cutter frame 15, it is possible to cut the butter block into horizontal pieces only, to suit requirements in this respect.

What I claim, is:

1. Apparatus for cutting butter blocks into small pieces, comprising a base plate, a standard fixed thereon, a support slidably mounted on said standard, means to move said support up and down said standard, a cutter frame fixed on said standard above

said support, vertical cutters in said frame, a horizontally turnable bow mounted on said standard, means to adjust the position of height of said bow, and a horizontal cutting wire carried by said bow.

2. In an apparatus as specified in claim 1, a graduated scale on said standard along which said support is movable.

3. In an apparatus as specified in claim 1, a bracket fixed on top of said standard, a wheel-operated screw-spindle mounted in said bracket, and a pattern disc above said cutter frame loosely mounted on the lower end of said spindle and prevented from turning with the latter.

In testimony whereof I have hereunto set my hand.

PAUL THIEME.