

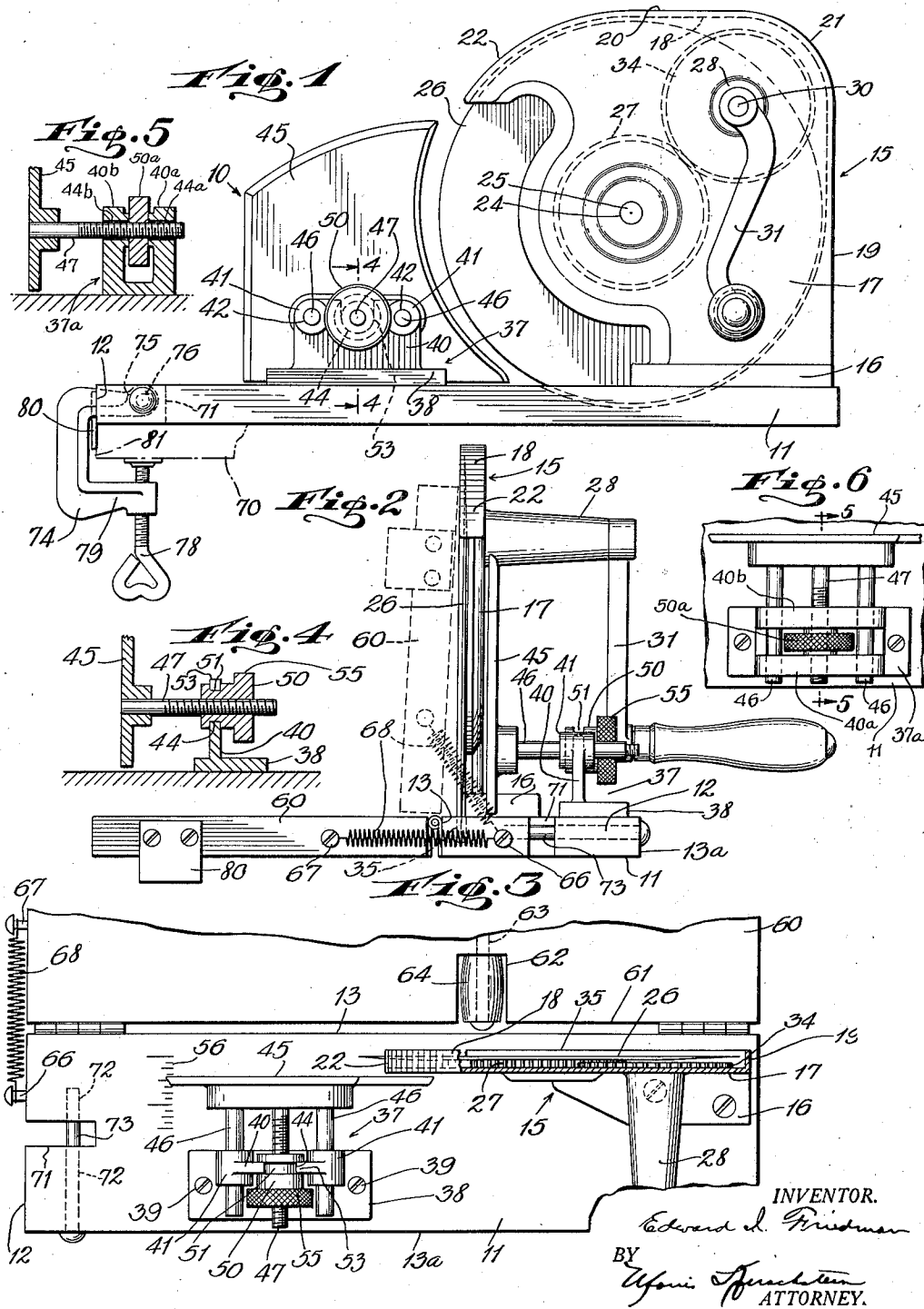
Aug. 31, 1937.

E. I. FRIEDMAN

2,091,632

SLICING DEVICE

Filed May 11, 1933



UNITED STATES PATENT OFFICE

2,091,632

SLICING DEVICE

Edward I. Friedman, New York, N. Y.

Application May 11, 1933, Serial No. 670,413

2 Claims. (Cl. 146-102)

This invention relates to slicing devices.

An object of this invention is to provide a device of the character described having highly improved means for adjusting the thickness of the slices to be cut.

A further object of this invention is to provide a slicing device of the character described provided with improved means for positioning and fastening the same on a counter or other support.

A still further object of this invention is to provide a device of the character described having improved means for facilitating the feeding of the object to be sliced.

Another object of this invention is to provide a compact, rugged slicing device of the character described, which shall comprise comparatively few and simple parts, be relatively inexpensive to manufacture, smooth in operation, safe to use, and withal practical and efficient to a high degree.

Other objects of this invention will in part be obvious and in part hereinafter pointed out.

The invention accordingly consists in the features of construction, combinations of elements, and arrangement of parts which will be exemplified in the construction hereinafter described, and of which the scope of application will be indicated in the following claims.

In the accompanying drawing, in which is shown one of the various possible embodiments of this invention,

Fig. 1 is a side elevational view of the slicing device embodying the invention;

Fig. 2 is a front elevational view of the slicing device shown in Fig. 1;

Fig. 3 is a fragmentary top plan view of the slicing device shown in Fig. 1 with parts broken away;

Fig. 4 is a cross-sectional view taken on line 4-4 of Fig. 1;

Fig. 5 is a cross-sectional view taken on line 5-5 of Fig. 6; and

Fig. 6 is a top plan view of an adjustable guide member and illustrates a modified construction.

Referring now in detail to the drawing, 10 designates a slicing device embodying the invention. It comprises a flat board 11, preferably of rectangular shape having a front edge 12 and side edges 13 and 13a. Fixed to the top of the board 11 adjacent the rear edge thereof and close to side edge 13, is a casting 15 having a flat bottom flange 16 screwed to said board. Extending upwardly from the flat flange 16 is a vertical wall 17 parallel to said edge 13 and extending from said wall is a flange 18 disposed at right angles

to said wall. The flange 18 is provided with a vertical portion 19, a top horizontal portion 20, a curved portion 21 interconnecting the portions 19 and 20 and a curved portion 22 extending from the portion 20.

The wall 17 is formed with a central opening 24 receiving a fixed pin 25 on which there is rotatably mounted a rotary disc slicing or cutting blade 26. Fixed to the rotary cutter 26 and rotatable therewith is a gear 27. Extending from the wall 17 toward edge 13a of board 11, is a sleeve 28 in which there is journaled a shaft 30, to the outer end of which there is attached a crank handle 31. The shaft 30 extends through the wall 17 and to the extending portion thereof is fixed a gear 34 meshing with the gear 27. It will now be understood that as the crank handle 31 is rotated, the cutter 26 will likewise be rotated by reason of the intermeshing of the gears 27 and 34.

The top surface of the board 11 may be provided with a groove 35 for receiving the bottom end of the rotary disc cutter 26.

Means is provided for guiding the object to be sliced and for regulating the thickness of the slices. To this end there is fixed to the top of the board 11 a casting 37 comprising a flat flange portion 38 secured as by screws 39, to said board. Extending upwardly from the flange 38 is a web 40 formed with a pair of parallel bosses 41 having axial, aligned openings 42 transverse to the side edges 13 of the board 11. The web 40 is furthermore formed with a central, substantially U-shaped notch 44 disposed between the bosses 41, for the purpose hereinafter appearing.

A flat guide plate 45 is disposed transverse to the upper surface of the board 11; and extending from said plate 45 are a pair of parallel pins 46 slidably received within the openings 42 of the bosses 41. Fixed to the plate 45 is a screw 47 disposed between and parallel to said pins 46. Said screw 47 extends within the U-shaped notch 44, the axis of said screw passing through the center of curvature of the curved portion of said notch. Mounted on said web 40 is a nut 50 having a circular groove 51 receiving the edge 53 of the web 40 at said U-shaped notch. A knurled head 55 on the nut 50 serves as a finger grip for rotating said nut. It will now be understood that rotation of the nut will cause the plate 45 to move toward or away from edge 13 of the board 11. The plate 45 is parallel to the slicing disc 26, as shown in Fig. 3 of the drawing. It will now be understood that an object, such as a loaf of bread, placed against the plate 45 may

be pushed forwardly as the cutter is rotated for slicing said loaf. The thickness of the slice may be adjusted by turning the nut 50.

A scale 55 marked on the upper surface of the board 11, serves to indicate the position of the plate 45 with respect to the cutter 26.

For the purpose hereinafter appearing, there is hinged to the edge 13 of the board 11, a second board 60, likewise preferably rectangular in shape and having the same length as the board 11 and being in the same plane therewith. As indicated in Fig. 2 of the drawing in dotted lines, the board 60 may be swung upwardly to substantially vertical position to lie against the disc 26. Thus when the slicer is not in use, the board 60 serves as a protection against injury from the rotary cutter. For retaining the board 60 in vertical position there is fixed to the front edges of the boards 11 and 60 a pair of screws 66 and 67. A coil tension spring interconnects said screws. It will now be understood that when the board 60 is moved upwardly to vertical position the spring 68 will serve to retain the board in vertical position.

Adjacent the inner edge 61 thereof, the board 60 is formed with a rectangular notch 62. A pin 63, fixed to said board, extends longitudinally of said notch and perpendicularly with respect to the edge 61. Rotatably mounted on said pin 63 is a roller 64 projecting somewhat above the upper surface of the board 60. Thus the object to be sliced, when being pushed forward, may contact the projecting portion of the roller, and feeding of said object is hence facilitated during the slicing operation.

For clamping the device to a counter 70 or other base or support, the front edge 12 of the board 11 is formed with a notch 71. The board 11 is furthermore formed with aligned openings 72 disposed transverse to said notch and on opposite sides thereof. A pin 73 inserted within said openings crosses the notch 71, as clearly shown in Fig. 3 of the drawing. A yoke clamp 74 provided with an upper portion 75 having an opening 76, receives the pin 73 therethrough. A screw 78 screwed to the bottom arm 79 of said yoke clamp is adapted to contact the underside of the counter 70. The clamp may be removed by first loosening the screw 78 and then withdrawing the pin 73.

Attached to the front edge of the board 60 is a plate 80 extending beyond the lower surface of said board 60. Said plate 80 is adapted to contact the front edge 81 of the counter 70 for positioning the slicing device on the counter.

In Figs. 5 and 6 of the drawing, there is illustrated a modified form of adjustable guide member for the food to be sliced. As illustrated in said figures there is attached to the board 11 a

member or casting 37a having a pair of parallel upstanding walls 40a and 40b formed with inwardly extending central, aligned bosses having flat inner faces and forming a space therebetween, for the purpose hereinafter appearing. Said bosses are formed with aligned horizontal openings 44a and 44b. The walls 40a and 40b are further formed adjacent the upper and outer edges thereof with horizontal aligned openings, receiving therethrough the parallel pins 46 of the plate member 45. The central screw 47 of said plate 45 passes through the openings 44a and 44b. Screwed to said screw 47 and received in the space between the bosses on the walls 40a and 40b, is a nut 50a having a knurled annular periphery. It will now be understood that upon rotating the nut 50a, the guide plate 45 will be moved toward or away from the member 37a. In this manner, the position of the guide plate 45 may be readily adjusted.

It will thus be seen that there is provided a device in which the several objects of this invention are achieved, and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiments above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawing is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a slicing device, a support, a member attached to said support and having a pair of parallel openings, said member having a vertical web provided with a U-shaped notch, a plate disposed perpendicularly to said support and having a pair of pins slidably extending through said openings, a screw extending from said plate fixed thereto and disposed parallel to said pins, and a nut screwed to said screw and non-slidably and rotatably engaging said notched portion of said member whereby rotation of said nut will cause sliding movement of said plate.

2. In a slicing machine, a board, a member attached thereto and formed with a vertical web, a pair of bosses formed with parallel openings on said web, said web being formed with a U-shaped notch disposed between said bosses, a guide plate having a pair of parallel pins extending therefrom and slidably received within said openings, a screw fixed to said plate, disposed parallel to said pins and extending therebetween, and a nut screwed to said screw and having an annular groove receiving the edge of said web at said notch.

EDWARD I. FRIEDMAN.