May 3, 1927.

1,626,922

C. F. DOWNS

CULINARY APPARATUS

Filed Aug. 10, 1925

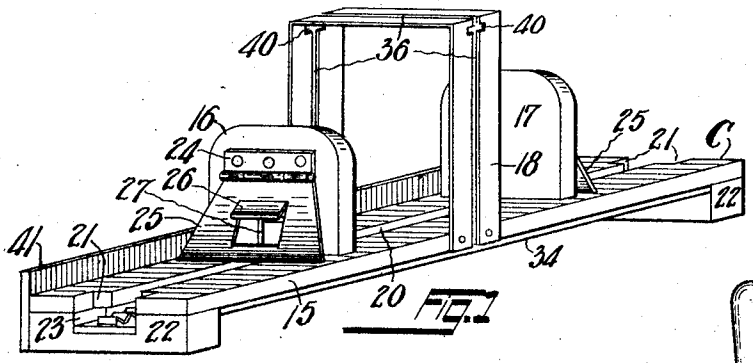


FIG. 1

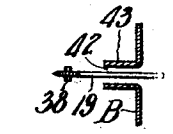


FIG. 2

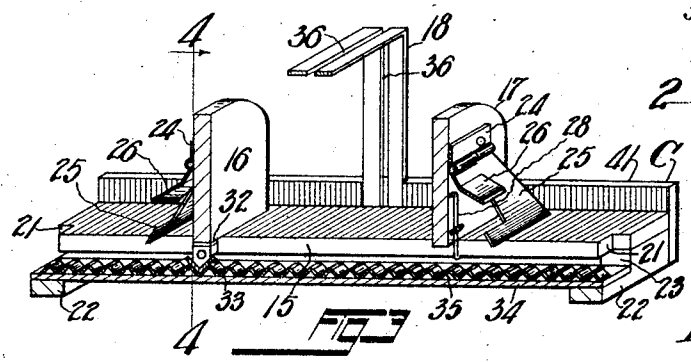


FIG. 3

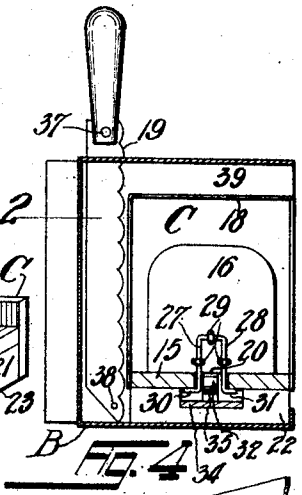


FIG. 4

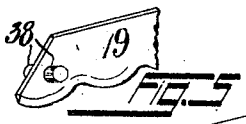


FIG. 5

FIG. 6

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UNITED STATES PATENT OFFICE.

CHARLES F. DOWNS, OF CLEVELAND, OHIO.

CULINARY APPARATUS.

Application filed August 10, 1925. Serial No. 49,335.

My invention relates, generally, to apparatus for storing and slicing objects and, particularly, to slicing apparatus in which the slicing is indexed and in which the sliced or the solid or the partly sliced object is properly held in desired position and in which the slicing knife is constructed and supported for most efficient action.

The main object of my invention is an efficient and economical culinary apparatus which is always ready for operation and is easy and convenient of operation and which retains either the solid object, or the slices thereof, or partly sliced, in position either during or before or after the slicing operation.

Another object of my invention is a compact culinary apparatus which can readily be installed in existing or in new cabinets either permanently or removably.

Another object of my invention is a culinary apparatus in which the slicing knife is stored in the apparatus in an out of the way position when not in use but always ready and handy for instant use and is guided in such a manner that the slicing is done evenly.

Other objects will appear during the description of the apparatus shown in the accompanying drawing.

The present invention is an improvement over my Patent No. 1,515,014, issued Nov. 11, 1924, for slicing apparatus.

My present invention is illustrated in the accompanying drawing as applied to a bread storing and slicing means insertable into a bread container or cabinet. I am aware, however, that modifications may be made as to the application of my invention as well as to structural details and arrangement of elements within the scope of the appended claims.

In the accompanying drawing:—

Fig. 1 is a perspective view of the slicing apparatus only and embodying the features of my invention.

Fig. 2 is a fragmental sectional view, taken on a vertical plane indicated by the line 2 in Fig. 4, and shows the slot to clear the front of the slicing knife with the stop pin in the knife.

Fig. 3 is a longitudinally sectional perspective view of the slicing apparatus shown in Fig. 1, the section is taken on a vertical plane and on the vertical axis of the apparatus.

Fig. 4 is a transverse section, taken on a vertical plane indicated by the line 4—4 in Fig. 3, and shows, in addition to the elements of Fig. 3, the case for the slicing apparatus and the slicing knife disposed vertically between the slicing apparatus and the rear wall of the case.

Fig. 5 is a fragmental view of the end of the slicing knife, on a larger scale, and shows the stop pin in the end of the knife.

Fig. 6 is a perspective view of a container having two compartments and the slicing apparatus and the case installed in the lower compartment; the door of the container being shown open to show the position of the slicing apparatus and the slicing knife is here shown disposed at an angle and the handle thereof projecting into the upper compartment.

Similar reference characters refer to similar parts throughout the views.

The entire culinary apparatus shown in Fig. 6 comprises, principally, the container A, the case B, and the slicing apparatus C.

Although the container A may be made of any standard or special formation it has, in the present instance, the upper or storage compartment 10 and the lower or slicing compartment 11. The door 12 is provided on the front of the container A. I prefer to use one door as shown so that one opening of the door provides access to both of the compartments as well as to the slicing knife.

In the present instance, the case B is insertable into and removable from the compartment 11 and is retained in this compartment by the flange 13 extending upward from the bottom of the container A. The top of the case B has the slot 14 for the purpose appearing presently.

In the present instance, the slicing apparatus C comprises, principally, the table 15, the brackets 16 and 17, and the guide 18 for the slicing knife 19.

The table 15 is composed of two pieces of material spaced apart to form the slot 20, and each piece has the notches 21 at each end of the slot 20 to widen the same for the purpose appearing presently.

In order to provide the necessary space for the mechanism on the bottom of the table 15, I provide the feet 22 at each end of

the table and cut the notch 23 in these feet of the same width as the notches 21 and of sufficient depth to mount some of the indexing mechanism therein as will appear presently.

The brackets 16 and 17 may be made in duplicate, but, to carry out my invention, it is not necessary that each of them have an indexing pawl.

Each of the brackets 16 and 17 has a strut like lock means and a hook like lock means.

The strut like lock means comprises the plate 24 secured to the bracket and the plate 25 hinged to the plate 24 and made sufficiently long to be disposed at an angle to the bracket when the bottom edge of the plate 25 contacts the top of the table 15 and when the bracket is in position on the table. The plate 25 may conveniently be slitted and some of the material thereof bent outward to form the handle 26 by means of which the plate 25 can more easily be raised or swiveled manually on the hinge joint and in relation to the bracket to raise the plate 25 off of the table when desired. The lower edge of the plate 25 automatically contacts the top of the table due to its own weight.

Instead of hinging the plate 25 to the plate 24, both of these plates may be combined into one plate having the upper end thereof secured to the bracket and the lower end thereof free. In this instance, it is preferred that a certain amount of resiliency is provided in the plate so that the lower edge thereof automatically engages the top of the table when the same is not held off of the table manually.

The hook like lock means is formed of round wire having the legs 27 and 28 secured to the outer face of the bracket by means of the staples 29 and the toes 30 and 31 bent outwardly from the legs. The legs extend some distance below the bottom of the bracket and through the slot 20 of the table and the toes engage the underside of the table adjacent to the slots 20 when brackets are in position on the table.

As seen in Fig. 4, the legs 27 and 28 are spaced from the wall of the slot 20, thereby permitting the bracket to swivel axially on the table without binding and thereby adjust itself to uneven ends of the object held by the brackets.

In the present instance, the bracket 16 is provided with the index pawl 32 secured to the underside of the bracket as seen in Fig. 3. The pawl means 32 is of known construction and has the V shaped member 33 floatingly and resiliently mounted therein so that the member 33 normally projects through the pawl means but can be pushed into the pawl means.

The rack support 34 extends between the feet 22 and the ends thereof are secured in the notches 23 of the feet 22. The rack 35, in the present instance of commercial corrugated material, is secured to the top of the support 34. The rack is so spaced, vertically, from the top of the table and from the bottom of the brackets that the pawl member 33 rests in the hollow of the corrugations of the rack 35 when the same is normally projecting through the pawl means 32.

This pawl and rack means constitutes the indexing means to slice an object so that all slices are of even thickness.

Each of the brackets 16 and 17 forms an independent unit which may be placed on or removed from the table at will for the purpose of cleaning or otherwise. Each of the brackets can readily be placed on the table by inserting the toes 30 and 31 of the hook like lock means through the notches 21 at the end of the slot 20 and then sliding the bracket along the top of the table to desired position. The brackets can readily be removed from the table by manually raising the plate 25 off of the table and sliding the bracket to the end of the table so that the toes 30 and 31 clear in the notches 21 and then raising the bracket upward and off of the table.

In the present instance, the guide 18 is formed of two strips of material bent U shaped and having the open ends of the U secured to the side edges of the table and extending upward from the table as an inverted U and spaced apart to form the slot 36 wherein the blade of the knife 19 is guided while the knife is in operation.

The slicing knife 19 may be of any suitable formation. It is preferred, however, that the knife has a handle held to the blade in operative position by the pins 37 but adapted to telescope over the blade so that the knife may be shortened for purpose of storing the same when not in use and when the storage space for the knife is limited. Instead of the telescoping handle indicated, the usual jack knife structure may also be employed to good advantage.

The outer end of the blade of the knife 19 is provided with the stop pin 38 extending preferably, from each side of the blade as shown in Figs. 2 and 5. The slot 36 is sufficiently wide to permit the blade to pass through and to retain the same in a vertical position but does not permit the projecting portions of the stop pin to pass through it.

In instances where the top of the guide 18 is spaced from the top of the case B, as shown in Fig. 4, the knife 19 is inserted into the space 39 between the top of the guide 18 and the top of the case B and is moved backward until the pin 38 is beyond the rear leg of the guide whereupon the knife can be moved downward with the blade in the slot 36 and operated as desired either see-sawing back and forth or straight or obliquely down-

ward or in any other desired manner. In either operation, the blade of the knife is guided and retained in a vertical position and cuts or slices the object straight.

I prefer to provide the notches 40 in both legs of the guide 18 and make these notches sufficiently deep to permit the pin 38 to pass through and thereby provide a ready means to insert the knife particularly when the top of the guide 18 contacts or is close to the top of the case B. The notches 40 are provided near the upper end of the legs so that the stop pin effectively limits the forward movement of the knife when the same is in operation.

The slicing apparatus C is made in one unit and may be inserted into the case B or into any other case or container.

When the slicing apparatus is intended for the case B, the table may be made sufficiently long to abut the inside of the ends of the case to prevent longitudinal movement of the table in the case and the guide 18 is so placed on the table that the slot 36 is in alignment with the slot 14 in the top of the case so that the blade of the knife can operate in the slot 36 and can be moved up into the slot 14 and out of the way when not in operation. When the knife is in this inoperative position, the handle thereof may conveniently rest on the top of and outside of the case to retain the knife in that position and the blade of the knife may extend down angularly into the case as seen in Fig. 6, or may extend straight down in the back of the slicing apparatus as seen in Fig. 4.

I prefer to provide the table 15 with the guide 41 extending longitudinally on the rear side of the table and projecting a short distance above the top of the table to guide one side of the object which is to be sliced.

When the slicing apparatus is installed in a case in which there is insufficient room between the rear of the slicing apparatus and the rear wall of the case to permit the knife to operate with sufficient stroke, I prefer to provide the slot 42 in the rear wall of the case in alignment with the slots 14 and 36 and make this slot sufficiently wide to permit the pin 38 to pass through it freely as seen in Fig. 2. When the knife is not in operation, the blade thereof needs not extend through the slot 42 and, therefore, does not interfere with the handling of the case.

In order to make the case B as air tight as possible, I prefer to use the material which would otherwise be cut out to provide the slot 42 and form the walls 43 therewith by bending them outward as seen in Fig. 2 to form a sort of housing around the slot 42 which housing is open at the outer end. When this apparatus is in use, it can be moved so that the blade of the knife can operate through the slot 42 and when this apparatus is not in use, the same can be moved back into the container A or other container or other wall so that the end of the wall 43 abuts the contacting wall and thereby effectively closes the slot 42.

As to operation:—The brackets 16 and 17 are placed on the table 15 as previously mentioned. The object D is placed on the table in such a position that the place of the object where the slicing is to begin is opposite the spot 36. The bracket 16 is then moved along on the table until it abuts one end of the object. The bracket 17 may also be moved along on the top of the table if desired until it abuts the other end of the object to retain the slices in position after the slicing operation has begun.

The knife 19 is then brought down from its inoperative position with the blade thereof vertical in the slot 36 and is then moved back and forth or otherwise to cut a slice off of the object. When the knife is moved forward to its full extent, the pin 38 abuts the rear of the guide 18 and thereby prevents the blade from leaving the cut.

After one slice is cut off of the object, the knife is moved upward out of the cut and the bracket 16 is then moved manually along on the top of the table toward the bracket 17 and thereby also pushes the object along on the table to the next slicing position.

When the bracket 16 is so moved along on the table, the resilient pawl member 33 operates over the rack 35 and engages the corrugations thereof. Since the bracket 16 is manually moved along on the table, the operator can easily feel when the member 33 moves into a depression in the rack and can thereby index the object on the table either one or more notches as desired.

When the bracket 16 is moved into any position on the table the lower edge of the plate 25 automatically engages the top of the table due to gravity and thereby locks the bracket in that position on the table. The bracket 17 is locked likewise.

When either of the brackets is moved toward the other, the lower edge of the plate 25 is automatically released from the top of the table and the bracket can be moved readily.

When either of the brackets is moved away from the other, the lower edge of the plate 25 is raised manually by means of the handle 26 to release the lock whereupon the bracket can be moved along on the table in either direction.

When the object D is being moved along on the table, the plate 25 on the bracket 17 can be swung up vertically and out of the way so that it need not be manipulated when the object is indexed by means of the bracket 16.

The bracket 17 needs not abut the object D during the slicing operation except when it is desired to retain the slices in position.

It is of advantage, however, particularly for storage purposes, to move the bracket 17 up against the end of the object to keep the slices together to prevent the drying out thereof or to cover a previously cut surface on the end of the object.

The container A and the case B, and the slicing apparatus C of the apparatus shown and described are each made as separate units so that the apparatus C can be installed in the case B or in any other case or container and so that the case B with the apparatus C therein can be installed in the container A or in any other container or apparatus.

In the present instance, the container A has the compartment 10 for storage purposes and the compartment 11 for the slicing apparatus. When the slicing apparatus C and the case B are placed in the compartment 11, the handle of the knife 19 rests on the top of the partition wall between the two compartments and projects up into the compartment 10. In this instance, the partition is provided with the slot 44 similar to and in alignment with the slot 14 in the top of the case B to permit the blade of the knife to project therethrough.

I claim:—

1. An apparatus of the character described including, a table to support an object, a bracket attachable to and removable from said table and adapted to be moved on said table to abut one end of the object, a bracket attachable to and removable from said table and adapted to be moved on said table to abut the other end of the object, and each of said brackets provided with means to automatically engage said table and thereby lock the bracket in the position it is moved to.

2. An apparatus of the character described including, a table to support an object, a bracket movable on said table to abut one end of the object, a bracket movable on said table to abut the other end of the object, each of said brackets provided with means to automatically lock the bracket in the position it is moved to, and means for indexing at least one of said brackets on said table.

3. An apparatus of the character described including, means to support an object, means for slicing the object, a pair of brackets movable toward each other to abut the object, each of said brackets provided with a lock means depending angularly from the bracket and having a free end adapted to automatically lock the bracket in the position it is moved to and to automatically release the bracket when the same is being moved toward the other of said brackets, and a handle on said lock means for manually releasing the same to permit the brackets to be moved away from each other.

4. An apparatus of the character described including, a table to support an object, a bracket movable on said table and toward the object, and a lock plate normally disposed at an angle to said bracket and having one end thereof hinged to said bracket and the other end thereof free and adapted to engage said table and thereby lock said bracket against movement away from the object.

5. An apparatus of the character described including, a table to support an object, a pair of brackets slidable toward each other on said table to abut the object, each of said brackets swivelable on said table to individually adjust themselves to the ends of the object, and a strut hinged to each of said brackets and having a free end normally holding said brackets against movement away from the object.

6. An apparatus of the character described including, a table to support an object, a pair of brackets movable toward each other on said table to abut the object, each of said brackets swivelable on said table to individually adjust themselves to the object, each of said brackets provided with a lock means depending angularly from the bracket and having a free end thereof adapted to automatically engage said table and thereby lock the bracket in the position it is moved to and to automatically disengage said table and thereby release the bracket when the same is being moved toward the other of said brackets, and a handle on said lock means for manually releasing the same to permit said brackets to be moved away from each other.

7. An apparatus of the character described including, a table to support an object, a pair of brackets movable toward each other on said table to abut the object, each of said brackets swivelable on said table to individually adjust themselves to the object, each of said brackets provided with a lock means depending angularly from the bracket and having a free end thereof adapted to automatically engage said table and thereby lock the bracket in the position it is moved to and to automatically disengage said table and thereby release the bracket when the same is being moved toward the other of said brackets, a handle on said lock, means for manually releasing the same to permit said brackets to be moved away from each other, and indexing mechanism between said table and one of said brackets.

8. An apparatus of the character described including, a table, a pair of brackets movable longitudinally and swivelable axially on said table, means on each of said brackets to retain the same on said table in operative positions intermediate the ends of said table, and means on each end of said

table to release said means on the brackets and thereby permit the brackets to be attached to and removed from said table.

9. In a culinary apparatus, a case having a slot in the top wall thereof to permit the blade of a slicing knife to be inserted through the top of said case and extended into and moved into the interior of said case, a slicing device adapted to be positioned in said case and having a guide slot for the slicing knife in alignment with the first mentioned slot, when so positioned, said slicing device being located in the front of said case when so positioned so as to provide a space between said rear wall and said slicing device to permit the slicing knife to be stored between said rear wall and said device with the handle thereof extending above said top wall.

10. In a culinary apparatus, a container, a partition in said container dividing the same into two compartments and having a slot, a slicing device made as an individual unit and having a guide for the blade of a slicing knife, said slicing device insertable into and removable from one of said compartments and when so inserted confined therein lengthwise to align said guide with said slot when said device is inserted into this one compartment, and said slot and said guide being sufficiently narrow to retain the handle of the knife in the other of said compartments.

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