T. J. FISCHER.

CULINARY IMPLEMENT.

APPLICATION FILED APR. 7, 1908.

959,210. Patented May 24, 1910.

2 SHEETS—SHEET 1.

Fig. 1

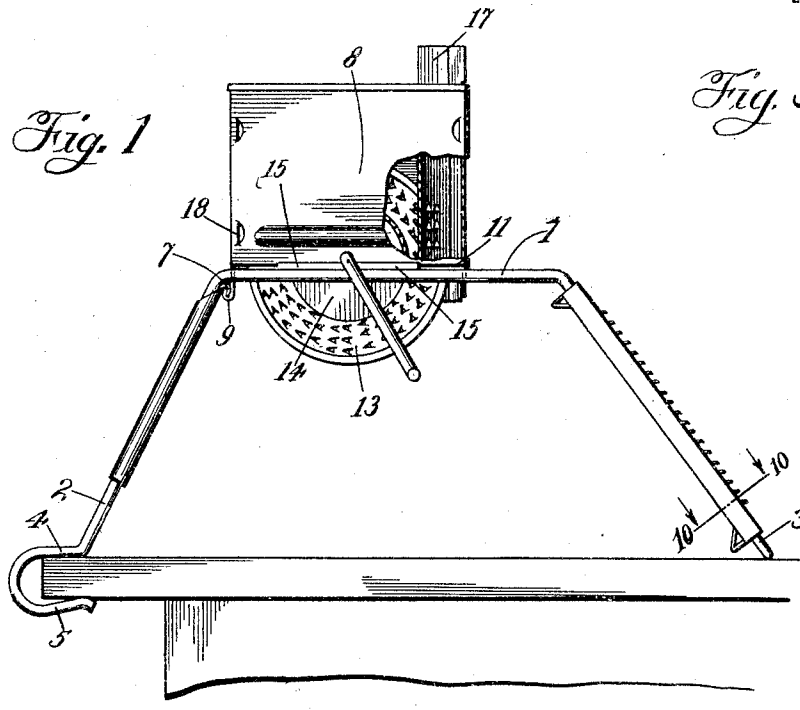


Fig. 9

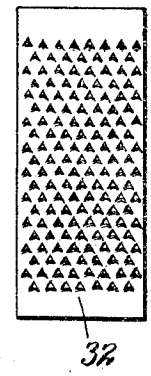


Fig. 2

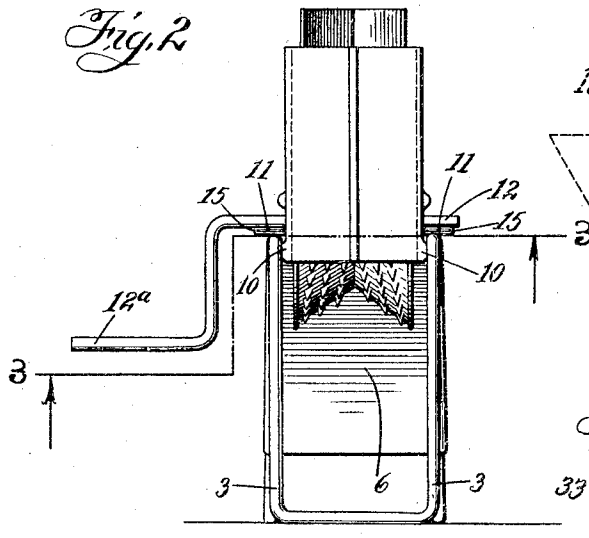


Fig. 3

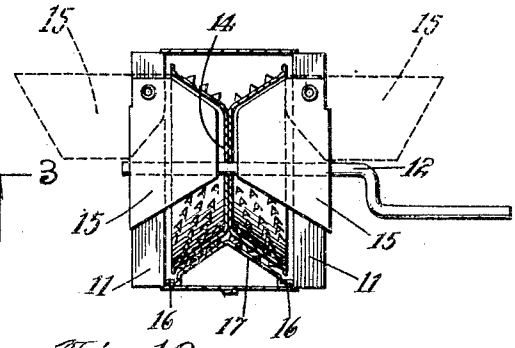
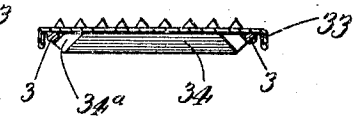


Fig. 10



Witnesses:

Wm. M. Haenel

Charles A. Cope

Inventor:

Theodore J. Fischer.

By Jones, Addington & Ames,

Attorneys

T. J. FISCHER.

CULINARY IMPLEMENT.

APPLICATION FILED APR. 7, 1908.

959,210. Patented May 24, 1910.

2 SHEETS—SHEET 2.

Fig. 4

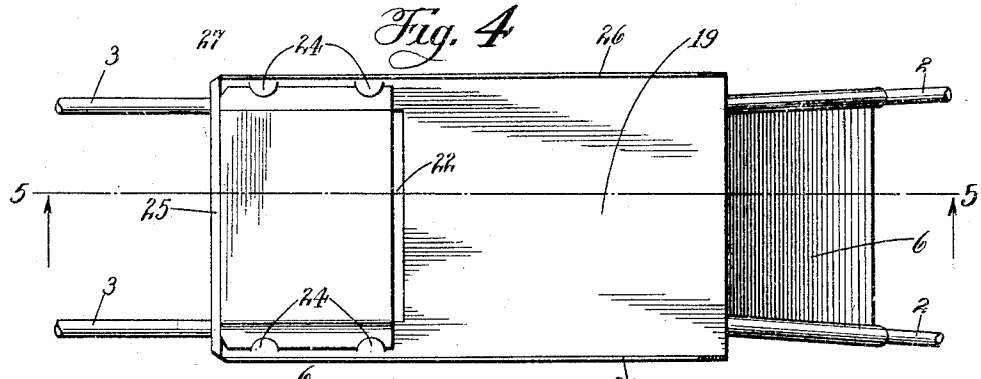
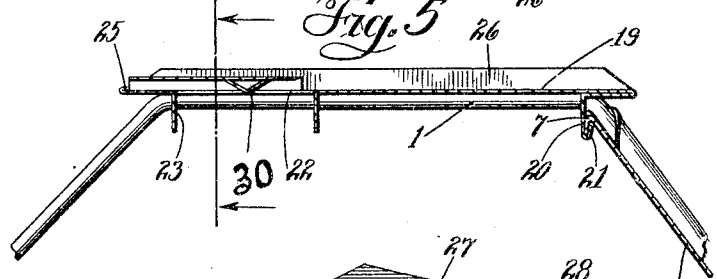


Fig. 5



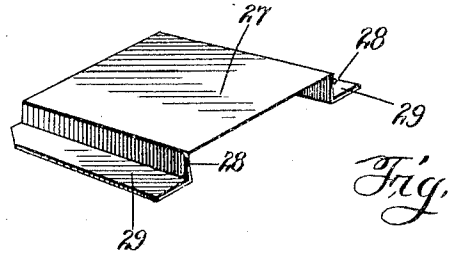
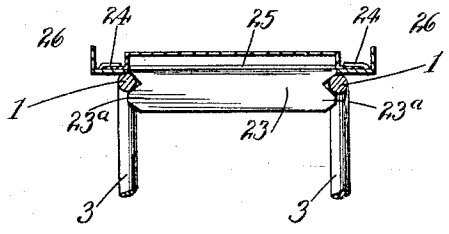


Fig. 7

Fig. 6



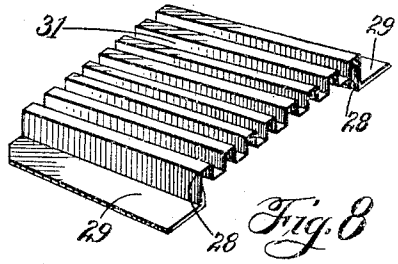


Fig. 8

Witnesses:
Wm. M. Haenel
Charles L. Cope.

Inventor:
Theodore J. Fischer.
By Jones, Addington & Ames,
Attorneys.

UNITED STATES PATENT OFFICE.

THEODORE J. FISCHER, OF CHICAGO, ILLINOIS.

CULINARY IMPLEMENT.

959,210. Specification of Letters Patent. Patented May 24, 1910.

Application filed April 7, 1908. Serial No. 425,698.

To all whom it may concern:

Be it known that I, THEODORE J. FISCHER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Culinary Implements, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

This invention relates to culinary implements, and has for its object the provision of a device by means of which a number of different culinary operations may be performed.

This object is attained by providing a frame of peculiar form adapted to be secured to a table. A number of material-reducing devices, such as slicers, etc., are also provided. These material-reducing devices are of such construction as to be adapted to be readily connected to and disconnected from the support frame.

For a full understanding of the invention reference is to be had to the following description and accompanying drawings, in which,

Figure 1 is a side elevation of the support-frame with the grinding device and the grater attached thereto, a portion of the former being broken away; Fig. 2 is a rear view of the support-frame with the grinding device attached and the grater removed; Fig. 3 is a section on the line 3—3 of Fig. 2, looking in the direction of the arrows; Fig. 4 is a partial plan of the support-frame showing the slide table attached thereto in place of the grinder; Fig. 5 is a sectional elevation on the line 5—5 of Fig. 4; Fig. 6 is a section on the line 6—6 of Fig. 5; Fig. 7 is a perspective view of a cutter detached from the slide table; Fig. 8 is a similar view to Fig. 7 but showing a different construction of the cutter; Fig. 9 shows the grater detached from the support-frame, and Fig. 10 is a section on the line 10—10 of Fig. 1.

Like characters of reference refer to like parts throughout the specification and drawings.

The support frame is constructed of a length of metal rod bent so as to form a pair of horizontal support members 1 and a front and a rear pair of inclined legs 2 and 3 respectively, the ends of the wire being bent at the bases of the legs 2 to form horizontal portions 4 and hooks 5 at the ends thereof, of suitable size and shape to engage a table top of ordinary thickness. By forcing the hooks 5 over the edge of a table so that the horizontal portions 4 and the ends of the legs 3, which are connected by a portion of the bent rod, rest on the upper surfaces of the table, a rigid connection between the frame and the table is established. The front legs 2 of the support-frame are connected by a guard plate 6, the purpose of which will hereinafter appear. The upper edge of the guard plate 6 is bent rearwardly and downwardly to form a hook 7 extending across the guard plate.

The hopper 8 of the grinding device, the width of which is substantially equal to the distance between the horizontal support members 1, has its front side extended downwardly and bent upwardly toward the front to form a hook 9 extending across the front side of the hopper, the hook 9 being adapted to engage the hook 7 of the guard plate 6 as shown in Fig. 1. The rear end of the hopper is extended downwardly and provided at its lowermost part with outwardly extending lateral projections 10 and the sides of the hopper are provided with laterally extending flanges 11 slightly above the plane of the projections 10. In attaching the hopper to the frame, the hook 9 is inserted in the hook 7 and the projections 10 are forced between the support members 1 which are sufficiently resilient to allow the passage of the projections. The support members 1 then spring back above the projections 10 and allow the flanges 11 to rest upon the support members 1. In detaching the hopper from the frame, the projections are forced between the support members 1 and when this has been effected the hook 9 is disengaged from the hook 7 of the guard plate. The sides of the hopper are provided with alined apertures for receiving the spindle 12 of the grinding drum 13, which drum is located within the hopper and is of a width approximately equal to the distance between the side walls thereof. The periphery of the drum is preferably concave and provided with a series of grinding projections. These projections are preferably formed by punching the material of the face of the drum 13 outward to form a series of small triangular holes and teeth. The purpose of forming the teeth of triangular shape is

that, while a good abrading action will be performed by the teeth whether the article is rubbed upon them in one direction or the other, the grating effect is coarser when the article is rubbed against the points of the teeth, so that two degrees of grating can be obtained according to the direction in which the article is rubbed. The drum is preferably affixed to the shaft 10 by means of a central web 14. Pivoted to the flanges 11 at the rear part thereof are scraper plates 15 which, when in their normal position, are located adjacent the inner periphery of the drum and they are of sufficient length to extend below the spindle 12 and thereby hold the latter in position. The scraper plates 15 are bent back upon themselves at their outer edges so as to embrace the flanges 11 when in their normal position, but they may be swung outward as shown in dotted lines in Fig. 3 in order to allow removal of the grinder drum when it is desired to clean the latter.

The hopper 8 has inwardly extending lugs 16 formed therein to form a guide-way for a grinder plate 17 which slidably engages between them and the rear end of the hopper. The lugs 16 are preferably formed by punching the material of the hopper inwardly and bending them as indicated in Figs. 1 and 3 of the drawings. The grinder plate 17 is of corresponding shape to the periphery of the grinder drum 13 and it is illustrated as being convex. It is provided with teeth similar to those on the drum 13 and is disposed in the hopper so as to be located within a short distance of the periphery of the latter. Lugs 18 similar to the lugs 16 are provided at the front end of the hopper and the grinder plate 17 may be supported in these if desired. The teeth of the drum 13 are illustrated as pointing toward the rear of the hopper so that a thorough grinding action takes place between the drum and the plate 17 when the spindle 12 is turned in a clockwise direction by the handle 12^a provided for that purpose. When the grinder plate 17 is located at the front end of the hopper, the crank is rotated in the opposite direction and a less perfect operation takes place owing to the teeth of the drum extending in the direction opposite to that of their rotation.

The slide table consists of a flat plate 19 preferably provided with upwardly extending flanges 26, the width of the plate being somewhat greater than the distance between the support members 1. The plate 19 is provided near its front end with a downwardly extending projection 20 formed at its end into a hook 21. A central, preferably rectangular, aperture 22 is formed through the plate 19 at its rear end and the metal of the rear side of said aperture is bent downwardly to form a flange 23 which is provided with side projections 23^a similar to the projections 10. The metal at the front edge of the aperture 22 may also be bent downwardly if desired. Guide lugs 24 are formed in the plate 19 preferably by forcing the material thereof upwardly. A stop 25 is provided extending across the plate 19 at its rear end. The slide table is attached and detached from the support frame in a similar manner to the grinding device.

Cutters of various forms may be detachably connected to the plate 19 by sliding them between the same and the lugs 24 to abut against the stop 25. The cutter shown in Fig. 7 consists of a metal plate 27 bent downwardly to form risers 28, and outwardly to form flanges 29. The flanges 29 are adapted to slide under the lugs 24 and abut at their ends against the stop 25. The width of the cutter is preferably somewhat less than the distance between the front edge of the aperture 22 and the front edge of the stop 25, so that the front edge of the cutter, which is sharpened, will be situated slightly to the rear of the front edge of the aperture 22. A projection 30 is formed on the under side of the cutter for deflecting the slices downward and preventing their adhesion to the cutter.

The articles to be sliced, such as potatoes, are placed upon the plate 19 and forced against the cutter 27, whereby a slice is removed and falls through the aperture 22. The height of the rises 28 may be varied in order that slices of varying thickness may be obtained. In the cutter shown in Fig. 8, the part 27 is bent into a series of rectangular corrugations 31, the depth of which corrugations is preferably about half that of the risers 28. The front edges of these corrugations are sharpened and by using a cutter of this kind a peculiar form may be given to the surface of the slices. The grater 32 is of ordinary construction, except that the teeth are triangular similar to those of the grinder drum, and is of a width slightly greater than the distance between the legs 3. The grater 32 is provided with downwardly extending side flanges 33 engaging the outer sides of the legs 3 and with end flanges 34 provided with projections 34^a similar to the projections 10, and operating in the same manner.

When the grinder is to be used, a dish or the like is placed beneath the frame and the grinder is attached to the horizontal support members 1 as described above. The articles to be ground or minced are inserted in the hopper and the crank 12^a turned in a clockwise direction if the grinder plate 17 is at the rear of the hopper, and in a counter clockwise direction if the grinder plate is located to the front of the hopper. The food stuff is thereby ground and falls into the dish, any particles which may be forced

through the holes in the drum being removed by the scraper plates 15. When it is desired to clean the various parts of the device, the grinder is removed, as described above, when the scraper plates can be swung outward and the grinder drum and spindle taken out of their bearing apertures. The grinder plate 17 can be withdrawn and all the parts are thus separated, ready for washing. The guard plate 6 and grater 32, both of which are usually kept in position, prevent any particles being thrown outward so that all the particles are collected on the dish.

When it is desired to slice potatoes or the like, the slide table is assembled on the frame in a similar manner to the grinder and a suitable cutter inserted beneath the lugs 34, a dish being placed below the frame as before. The articles to be sliced are pushed to and fro against the cutter and the slices are deflected by the projection 30 into the dish below.

When it is desired to grate bread or the like, the legs 3 of the frame are placed in a dish, the greater part of the dish projecting toward the front of the frame, and the bread is rubbed in the well known manner on the grater. The grater 32 may be attached to the frame with either end up and a coarse or fine grating may be obtained, according to the direction in which the teeth point.

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

1. In a culinary implement, the combination with a support frame comprising oppositely disposed resilient members, of a material-reducing device consisting of a body portion and projections extending downwardly from said body portion, said projections being formed with lateral extensions adapted to be forced between the resilient members of said support frame and engage beneath said resilient members.

2. In a culinary implement, the combination with a support frame comprising oppositely disposed resilient members carrying a retaining hook, of a material-reducing device consisting of a body portion having projections extending downwardly therefrom, said projections being formed with lateral extensions adapted to be forced between the resilient members of said support frame and engage beneath said resilient members, said material-reducing device being also provided with a retaining hook for engaging the retaining hook of said support frame.

3. In a culinary implement, in combination, a support-frame consisting of a rod, bent to form two substantially horizontal and parallel members and two pairs of inclined legs therefor, and a guard plate fixed between one pair of said legs and having a hook at its upper part; and a removable material reducing device provided with means for engaging said hook, said material reducing device being supported on said frame, between said horizontal members.

4. In a culinary implement, in combination, a support-frame consisting of a rod, bent to form a pair of substantially horizontal and parallel members, a rear pair of legs for said horizontal members connected at their lower ends, a front pair of legs for said horizontal members, horizontal extensions for said front pair of legs, said extensions being formed with table edge engaging hooks at their outer ends, and a guard plate mounted between one pair of said legs and having a hook at its upper part; and a material reducing device, supported on said frame, between said horizontal members, and means on said material reducing device for engaging the hook of said guard plate.

5. In a culinary implement, in combination, a support-frame comprising two substantially horizontal members and legs therefor, a hook supported by said frame, and a material reducing device comprising a body part, having a hook adjacent one end for engagement with the first-mentioned hook, and a downwardly extending flange adjacent the other end provided with lateral projections capable of being forced between the horizontal members of the support frame and locking the material reducing device thereon.

6. In a culinary implement, in combination, a slide table having an aperture therein and provided with a slideway adjacent the aperture, a cutter consisting of a plate bent downwardly to form risers and outwardly extending flanges capable of insertion in the slideway, the under surface of the cutter being provided with a deflecting projection, and means for supporting the slide table.

7. In a culinary implement, in combination, a slide table having an aperture therein and provided with a slideway adjacent the aperture, a cutter consisting of a plate bent to form a series of rectangular corrugations, risers and outwardly extending flanges for insertion in the slideway, the other surface of the cutter being provided with a deflecting projection, and means for supporting the slide table.

8. In a culinary implement, in combination, a support-frame consisting of two horizontal members and legs therefor, a hook supported by said frame, and a cutter carrying slide table provided with a hook adjacent one end, for engaging the hook of the support-frame, and with a downwardly extending flange adjacent its other end, the downwardly extending flange being formed with lateral projections, adapted to be forced between the horizontal members of the support frame, to lock the slide table in position on the support-frame.

9. In a culinary implement, in combina-

tion, a support-frame comprising two substantially horizontal members and a pair of inclined legs therefor, and a grater having downwardly extending end flanges, with lateral projections thereon, adapted to be forced between said legs to detachably retain the grater in position on the support-frame.

10. In a culinary implement, in combination, a support-frame comprising oppositely disposed resilient members and legs therefor, and a material reducing device consisting of a body portion, and projections extending downwardly from said body portion, said projections being formed with lateral extensions adapted to be forced between the resilient members of said support-frame and engage beneath said resilient members.

In witness whereof, I have hereunto subscribed my name in the presence of two witnesses.

THEODORE J. FISCHER.

Witnesses:
M. L. FARRAR,
CHARLES G. COPE.