Aug. 15, 1944. H. C. SIMMONS 2,355,755

SLICING KNIFE

Filed Feb. 19, 1943 2 Sheets-Sheet 1

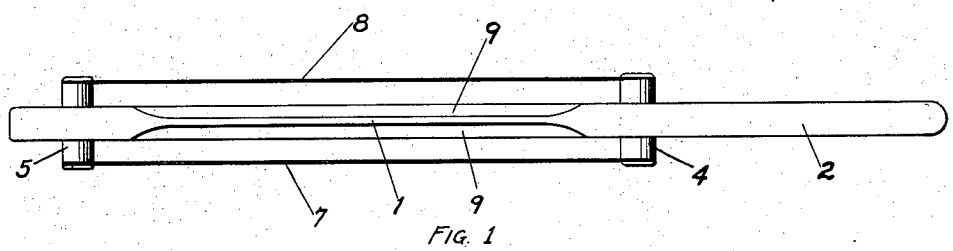


FIG. 1

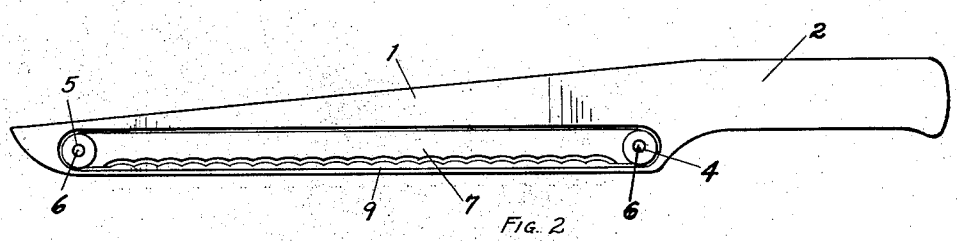


FIG. 2

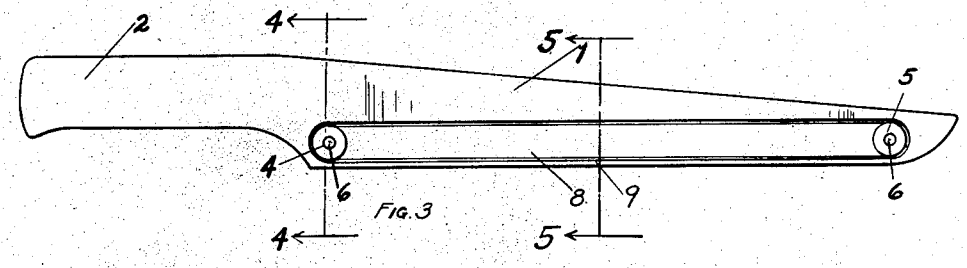


FIG. 3

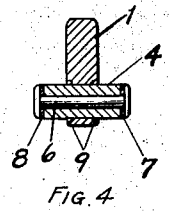


FIG. 4

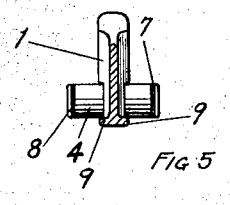


FIG. 5

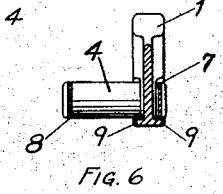


FIG. 6

INVENTOR.
H. C. SIMMONS
BY
Merrill M. Blackburn
ATTORNEY.

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SLICING KNIFE

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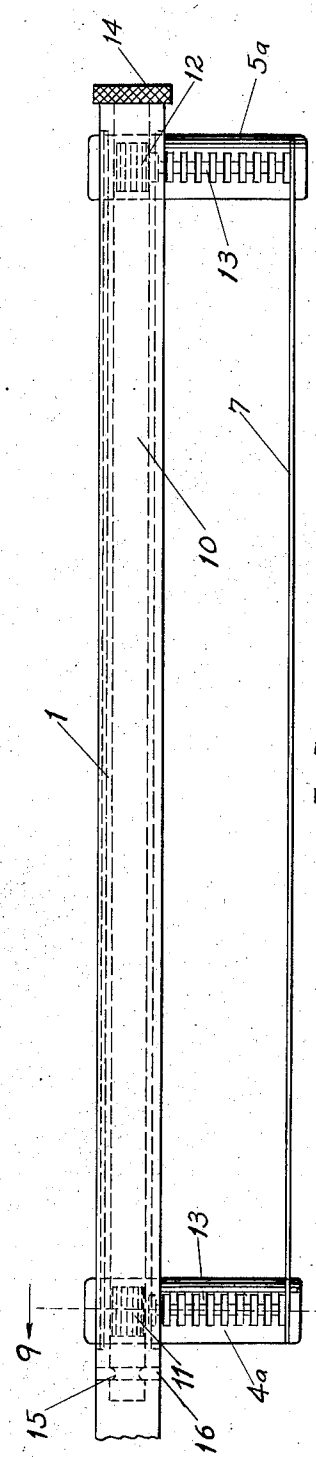


Fig. 7

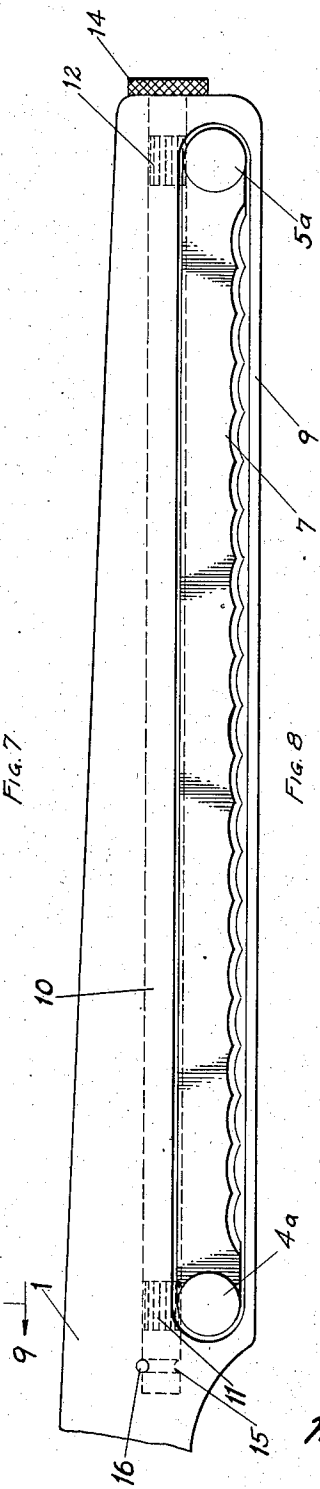


Fig. 8

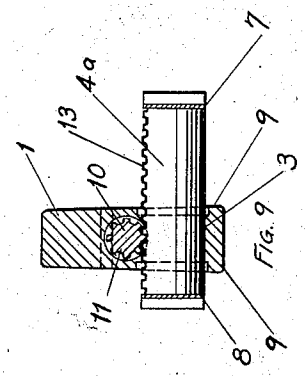


Fig. 9

INVENTOR.
H. C. SIMMONS
BY
Merrill M. Blackburn
ATTORNEY.

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SLICING KNIFE

Haryl C. Simmons, Davenport, Iowa

Application February 19, 1943, Serial No. 476,401

8 Claims. (Cl. 30—283)

The present invention relates to the culinary art and more particularly to a slicing knife for use in slicing bread, cake, meat, cheese, butter, and the like. Among the objects of this invention are the provision of an improved knife for the purpose indicated; the provision of an improved knife which can be quickly and economically manufactured; the provision of a knife of the character indicated which can be adjusted for minimum or maximum thickness of slice or any thickness in between these two; the provision of a knife of the character indicated in which the cutting blade can be adjusted into a protecting recess in the body of the knife; and such further objects, advantages, and capabilities as will hereafter appear and as are inherent in the construction disclosed herein. My invention further resides in the combination, construction, and arrangement of parts illustrated in the accompanying drawings and, while I have shown therein what is now regarded as the preferred embodiment of this invention and a modification thereof, I desire the same to be understood as illustrative only and not to be interpreted in a limiting sense.

In the drawings annexed hereto and forming a part hereof,

Fig. 1 is a plan view of a slicing knife constructed in accordance with this invention;

Figs. 2 and 3 are side elevations of opposite sides of this knife, showing the cutting blade upon one side of the body member and the tension-retaining blade or member upon the opposite side thereof;

Fig. 4 represents a transverse section substantially along the plane indicated by the line 4—4, Fig. 3;

Fig. 5 represents a transverse section approximately along the plane indicated by the line 5—5, Fig. 3;

Fig. 6 represents a section similar to Fig. 5 but showing the blade adjusted into protected position;

Fig. 7 represents a modification of the structure shown in Figs. 1 to 6, in plan view and with a portion of the handle broken away;

Fig. 8 is a side elevation of the structure shown in Fig. 7; and

Fig. 9 represents a cross-section substantially along the plane indicated by the line 9—9, Fig. 7.

Reference will now be made in greater detail to the annexed drawings for a more complete description of this invention. The body member 1 is provided with a handle 2 and toward each of its ends with openings 3 for the reception of blade-supporting means 4 and 5. These supporting means are preferably of uniform diameter throughout and also preferably cylindrical in form. As shown, they comprise an outside tubular member through which is passed a closely fitting rivet 6. This rivet may have a head at one end and a washer at the other end or may have washers at both ends. Also, a bolt may be used and a nut mounted on the threaded end thereof to hold the parts in assembled relation. If this latter construction is adopted, it would be advisable for the nut to be approximately circular in form and provided with spanner notches so that it is not easy to tamper with the assembly, since it is undesirable for the householder to disassemble the knife and attempt to sharpen it. Such sharpening should be done upon a machine provided for that purpose.

The members 7 and 8 may also be supported in other ways, as, for example, by means of solid or tubular members 6 passing through the openings in the members 7 and 8 and having a press or drive fit therein. These blade-supporting members may then be spun or swagged at their ends to insure that the blades and tension-retaining means will be held in place thereon.

Upon one side of the body member is a sharpened cutting blade 7 while upon the opposite side thereof is a tension-retaining member 8. These members 7 and 8 are perforated at their two ends and secured to the ends of the supports 4 and 5. When this slicer is assembled, the parts 7 and 8 are made taut so that there will be no undesirable bending thereof when using the knife.

The body member 1 may be made of wood, plastic, or other suitable material, and is provided on opposite sides with recesses extending between the supports 4 and 5 for the reception of the sharpened blade 7. This blade may be assembled on either side of the body member so that the slicer will be adapted for use by either a right or a left handed person. When one has finished using the knife and is ready to put it away, the supports 4 and 5 may be shoved through the body member so as to carry the blade 7 into a protected position upon one side of the body member. In this position, the rib 9 along the bottom of the body member acts to protect the sharp edge of the blade from being engaged by the hands of the user or by hard objects which might dull the blade. This is a very desirable safety feature and does not interfere in the least with the utility of the slicer.

The tension-retaining member 8 may be constructed either as a blank blade, as shown, or may consist of a wire stretched between the two supports 4 and 5. I have used both forms and consider the blank blade as the preferable one. If, in assembling the slicer, rivets are used for the supports 4 and 5 and the ends of these are riveted to hold the device assembled, then when disassembling the slicer for the sharpening of the blade, the ends of the rivets will be ground off so that they can be driven out, thus freeing the

blade so that it may be removed for sharpening. When using the device for slicing, the edge of the rib nearest the blade acts as a guide to keep the slice of uniform thickness.

When slicing butter, cheese, or the like, it is preferable to use the blank blade **8**, rather than the sharpened blade and just push it through the material being cut. While I prefer to construct these slicers for the cutting of any thickness of slice up to approximately nine-sixteenths of an inch ($\frac{9}{16}$''), it will be understood that the maximum thickness may be made more or less than that amount by a proper selection of the materials for the supports **4** and **5**.

It will of course be understood that, while I prefer to have the blade **7** scalloped, as shown, it is also possible to use a sharpened blade which is without scallops and that I regard such as coming within the scope of this invention.

A modification of the structure just described is shown in Figs. 7 to 9, in which is disclosed means for positively and uniformly adjusting the supports **4** and **5** through the body member **1**. This is shown as comprising a rod **10** of substantially uniform diameter throughout, provided with gear teeth at **11** and **12**, cooperating with corresponding gear teeth **13** on the supports **4***a* and **5***a*. As shown, the rod **10** is provided at one end with a milled operating head **14** secured at the forward end of the rod in any suitable way. Adjacent the opposite end of the rod is a groove **15** which receives a pin **16** passed through an opening in the body member and having a press fit therein. This pin prevents endwise movement of the rod. A cotter-pin straddling the rod would accomplish the same purpose, but the pin shown is simpler, just as efficient, less expensive to manufacture, and easier and less costly in time to assemble. The rod **10** should fit closely within the opening in the body member so that it will not have lateral play therein when being turned to actuate the supports **4***a* and **5***a*.

In this construction, as in the structure of Figs. 1 to 6, the supports **4***a* and **5***a* may be either simple and solid or compound, comprising tubular means with rivets or bolts passed therethrough, or even tubular means without anything passed therethrough, the ends extending through the openings in the end portions of the cutting members **7** and **8** and being expanded therein to hold the blades properly positioned on their supports.

Various departures from my disclosure may be made without departing from the spirit of this invention or the scope of the appended claims. For illustration, we may assume the handle **2** made independent of the body **1** and secured to the rod **10**. In this case, the head **14** would be omitted and the handle would be preferably, although not necessarily, symmetrical in form. Also, it would preferably extend axially with relation to the rod **10**. The pin **16** could be located at any suitable place along the length of the rod.

Having now described my invention, I claim:

1. In a slicing knife of the type indicated, a rigid body having transverse openings toward its ends, rigid supporting members fitting closely in but manually slidable through said openings, a cutting blade mounted upon corresponding ends of said supporting members at one side of said body, and a tensioning member at the opposite side of said body, secured to the remaining ends of said supporting members and assisting in holding said blade taut.

2. In a slicing knife, an elongated rigid body member having transverse openings toward its two ends and longitudinal recesses extending from each opening toward the other, transverse supporting members extending through said openings and having a slicing blade mounted upon their ends upon one side of the body member, and a tension-retaining member for the blade connecting the remaining two ends of said supporting members upon the other side of the body member.

3. A slicing knife comprising an elongated rigid body member provided toward its two ends with substantially parallel transverse openings for the reception of blade supports, substantially cylindrical supports mounted in said openings and manually slidable therein to produce adjustment of the spacing of a blade from the body member, a cutting blade and a tension-retaining member mounted upon the end portions of said supports upon opposite sides of said body member.

4. A structure as defined by claim 3 in which the blade supports comprise tubular means and a blade-holding member extending through each thereof and holding means at each end of the blade-holding member whereby the blade and the tension-retaining member may be held against the ends of the tubular means.

5. A slicing knife comprising an elongated rigid body, supports passed through the end portions thereof, a cutting blade along one side of said body and secured to the ends of said supports upon that side of said body, and a blade tension-retaining member upon the opposite side of said body, mounted upon the second ends of said supports.

6. A slicing knife comprising an elongated rigid body, supports passed through the end portions thereof, a cutting blade along one side of said body and secured to the ends of said supports upon that side of said body, and a blade tension-retaining member upon the opposite side of said body, mounted upon the second ends of said supports, said body having a lateral depression into which said blade may be pressed by forcing the supports through the openings in the body in which they are mounted, whereby to protect the edge of the blade against undesired contact with other objects.

7. A structure as defined by claim 5 in which the supports are provided with rack teeth and the body has a rigid operating member extending lengthwise thereof and provided with gear teeth which engage the rack teeth for longitudinal operation of the supports whereby to adjust the spacing of the cutting blade from the body.

8. A bread slicing knife comprising a rigid support having opposite surfaces and a handle, a pair of spaced blade supporting members slidably mounted in said support and adapted to extend through said support, blades mounted on the members one on each side of the support, whereby adjustment of one blade closer to the support will move the other blade farther from said support, each opposite surface of the support being adapted to act as a guide when engaged with the surface of a loaf of bread to guide the blade.

HARYL C. SIMMONS.