E. KRAFFT.

KNIFE.

APPLICATION FILED APR. 29, 1921.

1,416,723.

Patented May 23, 1922.

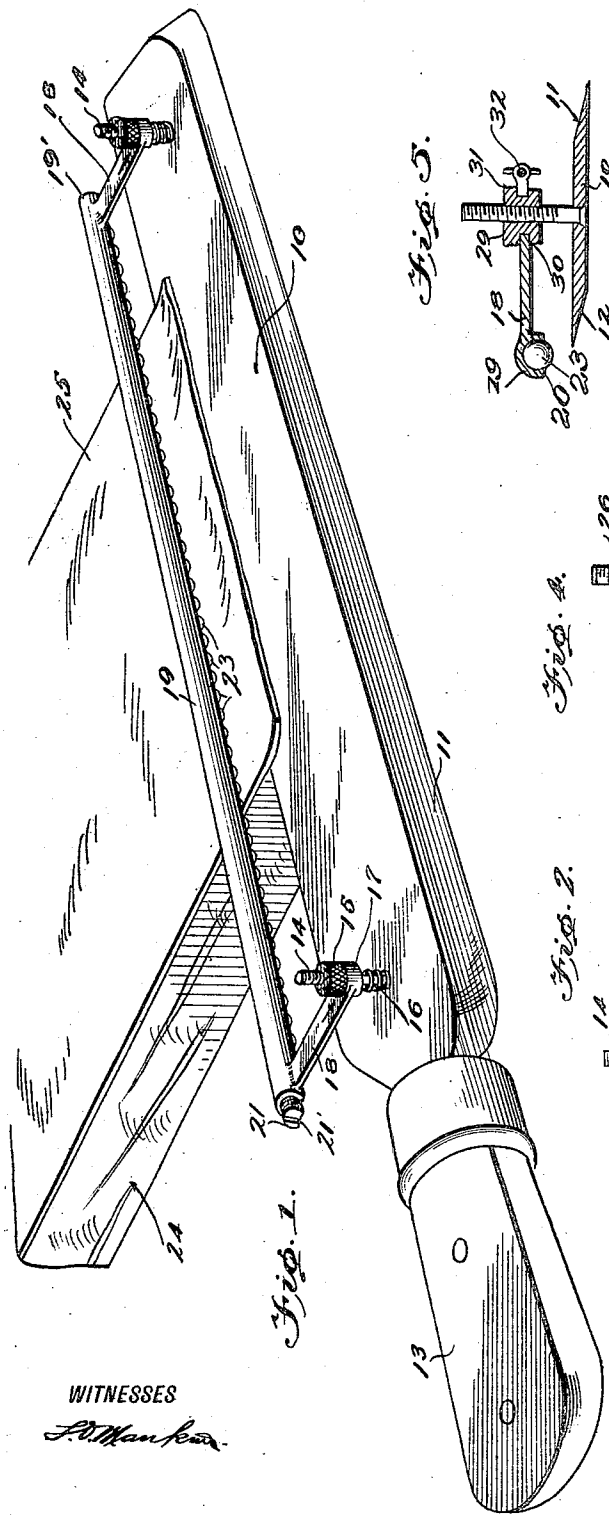


Fig. 1.

Fig. 5.

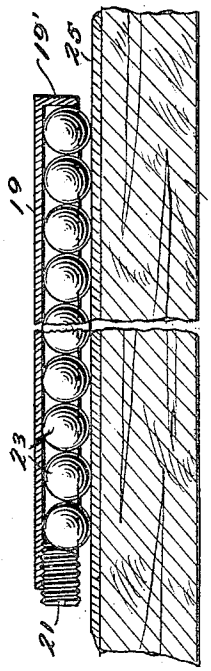


Fig. 3.

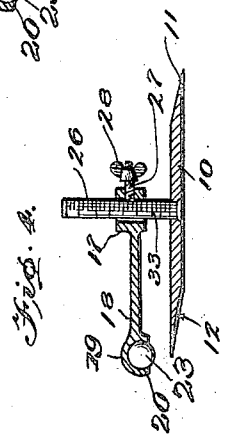


Fig. 4.

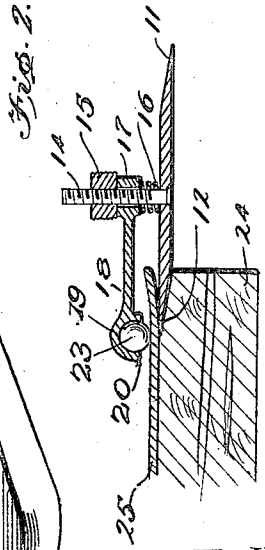


Fig. 2.

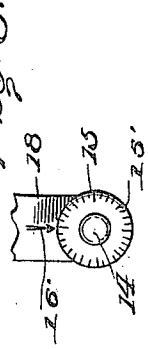


Fig. 6.

WITNESSES

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KNIFE.

1,416,723. Specification of Letters Patent. Patented May 23, 1922.

Application filed April 29, 1921. Serial No. 465,563.

To all whom it may concern:

Be it known that I, EMIL KRAFFT, a citizen of the United States, and a resident of Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Knives, of which the following is a specification.

This invention relates to a knife, and more particularly to a knife for cutting the rind from bacon or a like purpose.

The object of the invention is to provide a knife having a guide or gage means associated therewith whereby the rind from bacon may be expeditiously and economically removed.

It is also an object of the invention that the knife be adapted for slicing the rind from bacon in either a right or left hand direction.

It is a further object of the invention that the knife may also be utilized for slicing the bacon in strips after the rind has been removed therefrom.

Other objects will hereinafter appear.

The invention is illustrated by way of example in the accompanying drawings, in which:

Figure 1 is a top plan view showing the preferred embodiment of my knife and the same being applied for removing the rind from a strip of bacon,

Figure 2 is a transverse section of the blade and guide means, and particularly illustrating the manner in which the guide means is adjustably held with relation to the blade,

Figure 3 is a longitudinal section of the tubular member for supporting the ball bearings and likewise the similar portion of the blade, the portions of the blade and tubular member being broken away as shown,

Figures 4 and 5 are views similar to that shown in Figure 2, but illustrating modified forms for adjustably holding the guide with relation to the blade.

Figure 6 is a detail view illustrating the manner in which the guide may be accurately adjusted.

Referring to the drawings in detail, and particularly to Figures 1 to 3 inclusive, 10 indicates a knife blade which is preferably of the thickness shown in Figure 2 and having the cutting edges 11 and 12. The edge 12 extends along one edge of the top face of the blade, while the edge 11 extends along the one edge of the bottom face of the blade, and one side of the edges are slightly inclined as shown. The blade 10 is also provided with a handle 13 which may be of any suitable construction. Adjacent each end of the blade 10 there is positioned a stud or post 14. These studs may be in the form of a screw bolt extending from the blade as shown, and suitably sweated or otherwise secured to the blade, or they may be formed with the blade if such is thought to be an advantage. In either instance the posts are threaded as shown for receiving a knurled nut 15.

A compression spring 16 encircles each post and interposed between the compression spring 16 and nut 15 is a collar 17, said collar in each instance having extending therefrom an arm 18. Each of the arms 18 terminate in a tubular member 19 and support the same therebetween. The tubular member 19 is closed at its forward end as indicated at 19′ and also provided with a slot on its lower side which extends from the closed end 19 to the opposite or rear end of the tube, as indicated at 20 Figure 2.

The rear end of the tube is threaded to receive the screw plug 21, said screw plug being slotted for a screw driver as shown, and also having its one side cut away as indicated at 21′. This cut-away portion of the screw plug may of course be brought into register with the slot 20, and thus permit a smooth surface to be presented on the lower side of the tubular member 19 and the entire length thereof.

In the tube 19 interposed between the closed end 19′ and the plug 21 are a plurality of ball bearings as indicated at 23, Figure 3. These ball bearings are so held by the tube that they may be freely revolved with respect to each other.

It will also be observed that each knurled nut 15 is formed with graduation marks 15′, said marks being arranged circumferentially of the top surface of the nut as shown and adapted to be used in connection with an arrow 16′ impressed in the adjacent top surface of each arm 18 as a gauge in lowering and raising the arms 18 and tube 19.

In the operation of the present device, the knife is applied for removing the rind from a strip of bacon as illustrated in Figure 1, in which 24 indicates generally the strip of bacon and 25 the rind thereof. As shown the edge 12 enters directly beneath the rind

25 and the ball bearings 23 engage the top surface of the rind. The blade is reciprocated in the usual manner for slicing and the cutting edge will be held for cutting the rind as close as possible, and thus avoiding any waste whatever. As is obvious the ball bearings 23 freely roll upon the rind and thus in no way retard the reciprocating movement of the blade 10 when so operated for slicing.

In case it is desired to make the cutting blade operate closer to the rind, it is only necessary to manipulate the nuts 15 for moving downwardly the arms 18 against the tension of the springs 16, and in this manner lessening the space between the tubular member 19 and the cutting blade 10 which will in turn cause the cutting blade to operate closer to the rind 25.

Any predetermined adjustment of the tube 19 with respect to raising or lowering the same may be made by utilizing the graduation marks 15 and the arrows 16′.

In case a deeper cut of the blade is wished, then of course it is only necessary to loosen the nuts 15 and permit the arms 18 and tubular member 19 to rise. Should it be desired to move the blade 10 in an opposite direction, that is, for permitting the operator to use his left hand instead of his right hand, as illustrated in Figure 1, it is only necessary to remove the nuts 15 from the posts 14 and turn the guide member so that the same will project from the edge 11 instead of from the edge 12. When it is desired to use the knife for slicing the bacon into strips after the rind has been removed, then the edge from which the guide does not project may be utilized for this purpose, as for instance in Figure 1, the edge 11 would be utilized for slicing, and as is obvious the tubular member 19 would in no way interfere when utilizing the knife for this purpose.

Referring to Figures 4 and 5, in which modified forms for adjusting the space between the arms 18 and the upper face of the cutting blade 10, are shown, in Figure 4 a square post 26 is substituted for the threaded post 14, as shown in Figure 1. The collar 17 is of course formed with an opening suitable for sliding upon the post 26, and by the means of a set screw 27 the position of the arms 18 may be adjusted with respect to the cutting blade 10, the set screw 27 being preferably provided with a butterfly nut 28 for convenience of its manipulation. In Figure 5 the springs 16, as shown in Figure 1, are not used, and for the knurled nuts 15 there is substituted a nut 29 which is formed with an annular slot 30 about the central portion thereof, and the upper portion of the nut knurled as at 31 so that it may be easily manipulated.

The arms 18 are each formed with a pair of semi-circular portions at their inner ends which are adapted to encircle the annular groove 30 of the nut 29, and also these semi-circular portions extend outwardly from the nut and are provided with registering openings through which a bolt may be passed for binding them together upon the nut, as generally indicated at 32.

In Figure 4 the post 26 may be provided with graduation marks upon one side thereof as at 33, and thus the extent the arms 18 and tube 19 are raised or lowered may be accurately determined. In Figure 5 the nut 29 may have its top surface graduated as in the case of the nuts 15 and likewise arrows 16′ may be made in the arm 18.

I claim:—

1. A knife of the character described, comprising in combination, a slicing blade, a slicing guide carried thereby, and means associated with the guide adapted to facilitate the sliding movement thereof over the surface with which the same may contact during reciprocation of the slicing blade.

2. A knife of the character described, comprising in combination, a slicing blade and a guide extending therefrom disposed in a plane parallel to the plane of the blade, and roller means associated with said guide means to permit an easy sliding movement over the surface with which said guide may contact during the reciprocation of the knife for slicing.

3. A knife of the character described, comprising in combination, a slicing blade, a handle on the one end thereof, a pair of arms extending from the upper face of said blade, a tubular member carried between said arms having a slot in the lower side thereof, and a plurality of roller bearings in said tube.

4. A knife of the character described, comprising in combination, a slicing blade, a handle on the one end thereof, a pair of arms extending from the upper face of said blade, one near each end thereof, a tubular member between said arms having a slot in its lower side extending longitudinally thereof, a plurality of roller bearings within said tubular member, portions of which are adapted to extend through the slot in said tubular member.

5. A knife of the character described, comprising in combination, a slicing blade, a handle on the one end thereof, a pair of arms extending from the upper face of said blade, a tubular member carried between said arms having a slot in the lower side thereof, and a plurality of roller bearings in said tube, and means by which said arms may be adjustably raised or lowered with respect to the upper face of the cutting blade.

6. A knife of the character described,

comprising in combination, a slicing blade having its cutting edge slightly inclined on its lower side and terminating with the forward edge of the upper face of the blade, a handle on the one end thereof, a pair of arms extending from the upper face of said blade, a tubular member carried between said arms having a slot in the lower side thereof, and a plurality of roller bearings in said tube.

7. A knife of the character described, comprising in combination, a slicing blade, a handle on the one end thereof, a pair of posts extending from the upper face of said blade, one near each end thereof, an arm extending from each of said posts, and forward to the cutting edge of said blade, a tubular member supported between said arms, having a slot in its lower side extending longitudinally thereof, a plurality of roller bearings within said tube, portions of which are adapted to extend from said slot, spring means for holding the arms in spaced relation with the upper face of the blade, and means by which said arms may be adjustably raised and lowered against the tension of said springs.

8. A knife of the character described, comprising in combination, a slicing blade, a slicing guide carried thereby, and movable means associated with the guide adapted to facilitate its sliding movement over the surface with which it may contact during reciprocal movement of the sliding blade.

9. A knife of the character described, comprising in combination, a slicing blade, a slicing guide carried thereby, and turnable means associated with the guide adapted to facilitate its sliding movement over the surface with which it may contact during reciprocal movement of the slicing blade.

10. A knife of the character described, comprising in combination, a slicing blade, a slicing guide carried thereby, means associated with the guide adapted to facilitate its slicing movement over the surface with which it may contact during reciprocal movement of the slicing knife, and means by which the distance between the slicing guide and slicing blade may be adjusted.

11. A knife of the character described, comprising in combination, a slicing blade, a slicing guide carried thereby, means associated with the guide adapted to facilitate its slicing movement over the surface with which it may contact during reciprocal movement of the slicing knife, and gauge means by which the distance between the slicing guide and slicing blade may be accurately adjusted.

12. A knife of the character described, comprising in combination, a slicing blade, a handle on the one end thereof, a pair of arms extending from the upper face of said blade, a tubular member carried between said arms having a slot in the lower side thereof, a plurality of roller bearings in said tube, and gauge means by which the distance between the side of the slicing blade and the guide may be accurately adjusted.

EMIL KRAFFT.