(No Model.)

F. W. WAITE & W. D. BROADWELL.

KNIFE GUARD.

No. 591,310. Patented Oct. 5, 1897.

FIG. 1.

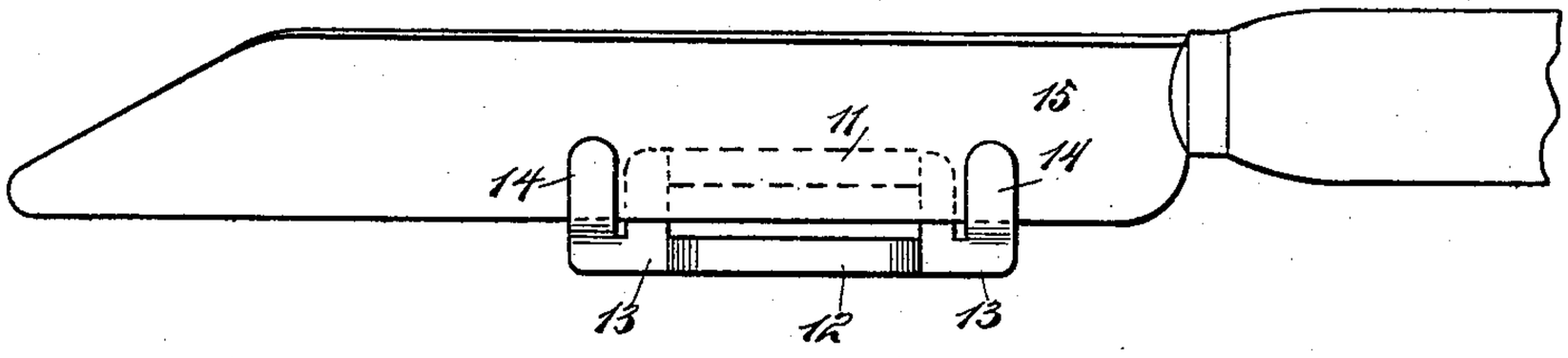


FIG. 2.

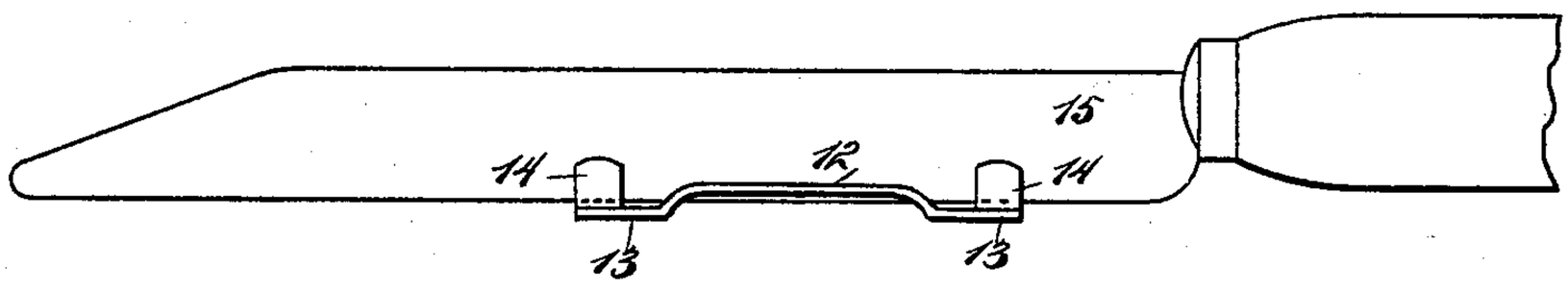


FIG. 3.

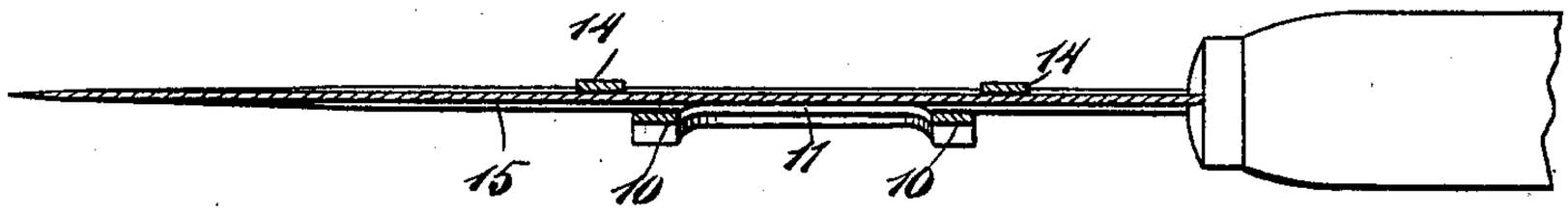


FIG. 4.

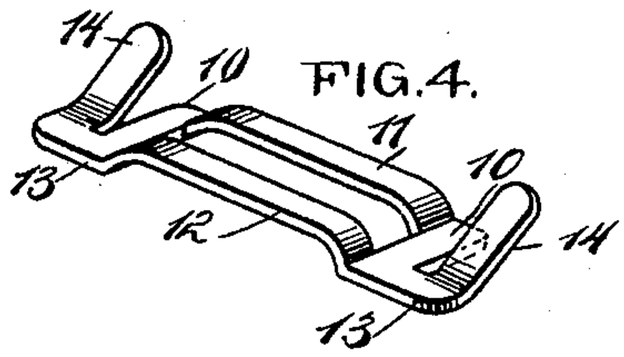


FIG. 5.

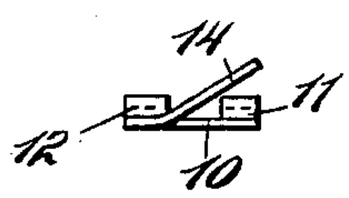
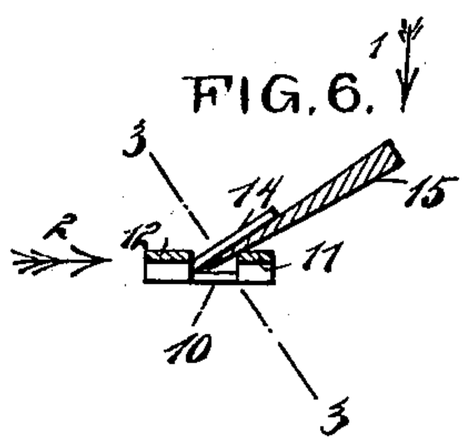


FIG. 6.



WITNESSES:

Donn Twitchell

Fred. Acker.

INVENTORS

F. W. Waite

W. D. Broadwell.

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

FRANK W. WAITE AND WILLIAM D. BROADWELL, OF PETERSBURG, VIRGINIA.

KNIFE-GUARD.

SPECIFICATION forming part of Letters Patent No. 591,310, dated October 5, 1897.

Application filed May 7, 1897. Serial No. 635,475. (No model.)

To all whom it may concern:

Be it known that we, FRANK W. WAITE and WILLIAM D. BROADWELL, of Petersburg, in the county of Dinwiddle and State of Virginia, have invented a new and Improved Knife-Guard, of which the following is a full, clear, and exact description.

The object of our invention is to provide a shield or a guard adapted to any knife, whereby any knife may be converted into an efficient parer, rendering it possible to economically and expeditiously remove the rind or skin from fruits or vegetables, and whereby, further, when the guard is attached to a knife it will be impossible for the blade to cut into the article being pared beyond the depth absolutely necessary for removing the rind or skin, thereby saving a large percentage of the fruit or vegetable which would otherwise be removed with said rind and lost.

Another object of the invention is to provide a guard for the knife-blade which will only take up as much room on the blade as is absolutely necessary for removing the rind or skin, thereby leaving the greater portion of the knife-blade available for slicing, cutting, or removing decayed parts of the fruit or vegetable.

Another object of the invention is to so construct the guard that it will be simple, durable, and economic, and may be readily removed from the knife-blade, permitting the knife to be readily sharpened when necessary.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of the knife, illustrating the guard applied thereto, the knife being viewed as indicated by the arrow 1 in Fig. 6. Fig. 2 is an edge view of the knife and guard, the view being taken as indicated by the arrow 2 in Fig. 6. Fig. 3 is a longitudinal section through the knife-blade and guard, the section being taken practically on the line 3 3 of Fig. 6. Fig. 4 is a perspective view of the guard. Fig. 5 is an end view thereof, and Fig. 6 is a vertical transverse section through the guard and through a knife-blade, to which it is attached.

The guard is shown in detail in Fig. 4. It is preferably constructed of metal, and any description of metal may be employed. The guard consists of flat end sections 10, connected by two arched bars 11 and 12, the said arched bars being practically in the same plane. At the lower or outer edge of each end piece 10 a lateral extension 13 is formed, which projects longitudinally outward, the extensions 13 being in the same plane as the plane of the end sections 10. From the upper edge of each extension-section 13 a tongue 14 is projected in a forwardly direction and at an angle to the said end sections or pieces 10 and the extension-sections 13. The guard is adapted to stand at a decided angle to the knife-blade 15. In fact, the guard, when the knife is held in the position for paring, will be horizontal, as shown in Fig. 6, and it is the intention that the knife-blade when placed in the guard shall serve the same purpose and operate in the same manner as the bit for a carpenter's plane, thus constituting the application of the principle of the carpenter's plane to a parer.

In operation the knife-blade is passed between the tongues 14 and the end sections 10, the tongues 14 being at the front of the blade and the end sections at the back, and the cutting edge of the blade will thus be brought between the two arched bars 11 and 12 of the guard, extending backward clear to the front or lower arched bar 12, while the rear and upper arched bar 11 will exert tension on the knife-blade, so as to effectually hold the guard in position thereon.

Under the construction above set forth it is utterly impossible for the knife-blade to cut into fruit or vegetables beyond the necessary depth for removing the rind, if the guard has once been placed thereon, and the guard is preferably made of such length as to cover only that portion of the cutting edge of the blade necessary for use for paring purposes, leaving the major portion of the blade perfectly free for all usages to which a knife-blade may be applied.

It is evident that the device may be ex-

ceedingly economic, that it is durable and simple, as heretofore stated, and that it may be readily placed in position on the knife-blade or removed therefrom, enabling the knife-blade to be sharpened in like manner as any other knife.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination with a knife-blade, of a guard provided with end sections, spaced bars connecting said end sections and lying one in advance of the said blade and the other in engagement with the rear of said blade, and tongues engaging the front of said blade and coacting with the bar at the rear of said blade to hold the guard in place, substantially as set forth.

2. A knife-guard, consisting of end sections in the same plane, arched bars connecting the end sections, and tongues connected with the end sections at the outer or forward portions thereof, the tongues being forwardly inclined and at an angle to the said end sections, for the purpose set forth.

3. A knife-guard, consisting of flat end sections, said sections being in the same horizontal plane, connecting-bars uniting the end sections, the connecting-bars being arched in the same plane, the arching of the bars being in a forwardly direction, extensions from the forward portions of the end sections, said extensions being carried laterally in opposite directions from the end sections, and in the same plane therewith, and tongues connected with the said extensions, and located one near each end section of the guard, said tongues being also given an outward inclination, being at an angle to the end sections, for the purpose specified.

4. The combination, with a knife-blade, of a guard, said guard consisting of horizontal end pieces, arched bars connecting the end pieces, and spring-tongues projected at an angle from the end pieces, arranged for engagement with the front portion of the blade, the edge of the blade being adapted to enter the space between the arched bars, and the rearmost arched bar being arranged for engagement with the back of the blade, for the purpose set forth.

5. The combination, with a knife-blade, of a guard consisting of end pieces in the same horizontal plane, upwardly-arched bars connecting the end pieces, and tongues projected from the said portion of the end pieces, said tongues being at an angle to the end pieces and arranged to engage with the front of the blade, the cutting edge of the blade entering the space between the arched bars, the arched bars being at an angle to the said blade, one bar in advance of the blade and out of contact therewith, and the other bar at the rear of the blade and in engagement therewith, for the purpose set forth.

FRANK W. WAITE.
WILLIAM D. BROADWELL.

Witnesses:
JAMES M. QUICKE, Jr.,
CHARLIE A. BASS.