No. 634,892. Patented Oct. 17, 1899.

W. S. JENKS.

CHOPPING KNIFE.

(Application filed June 13, 1899.)

(No Model.)

Fig. 1.

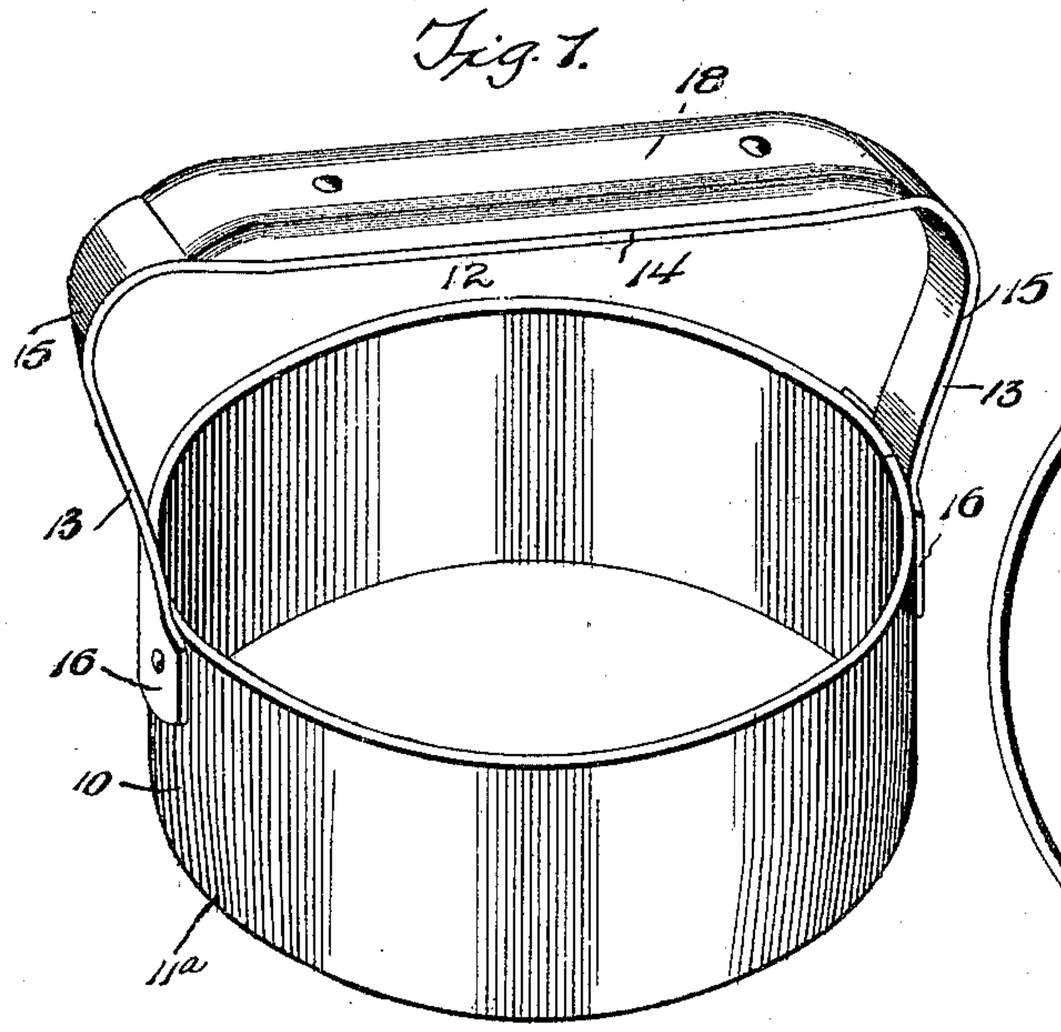


Fig. 2.

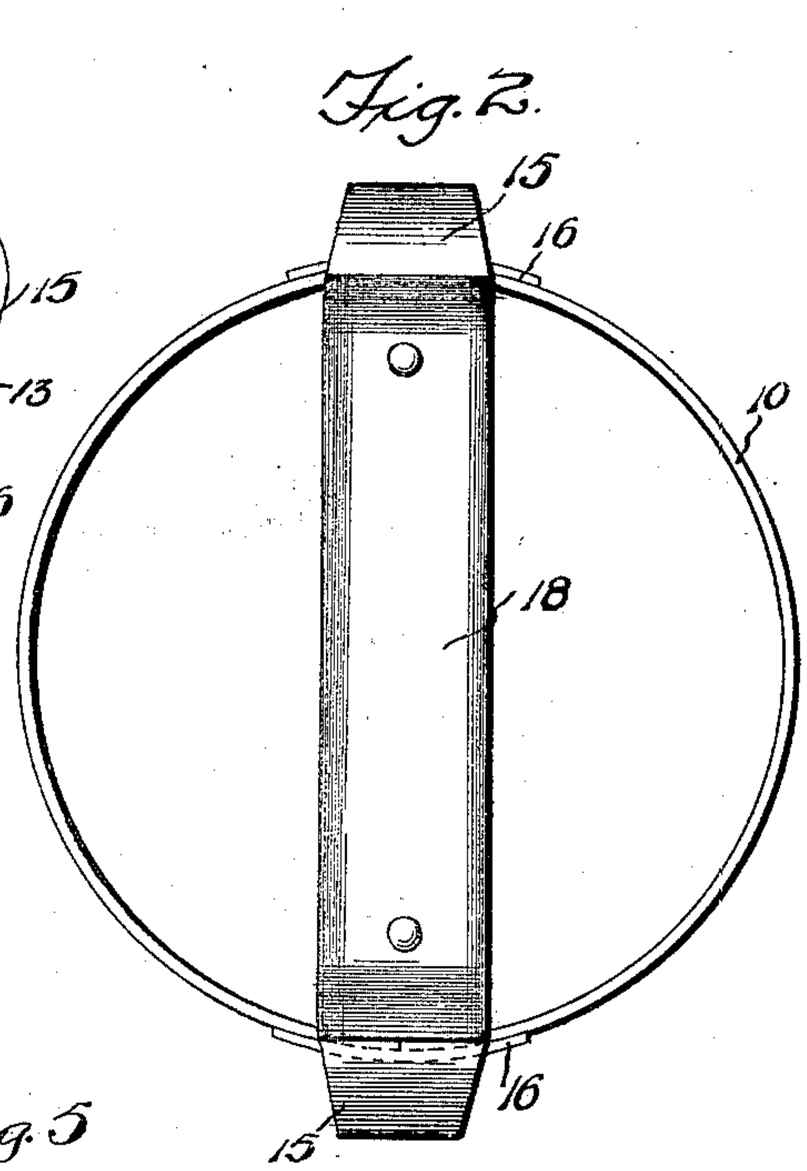


Fig. 5

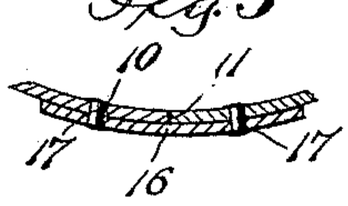


Fig. 3.

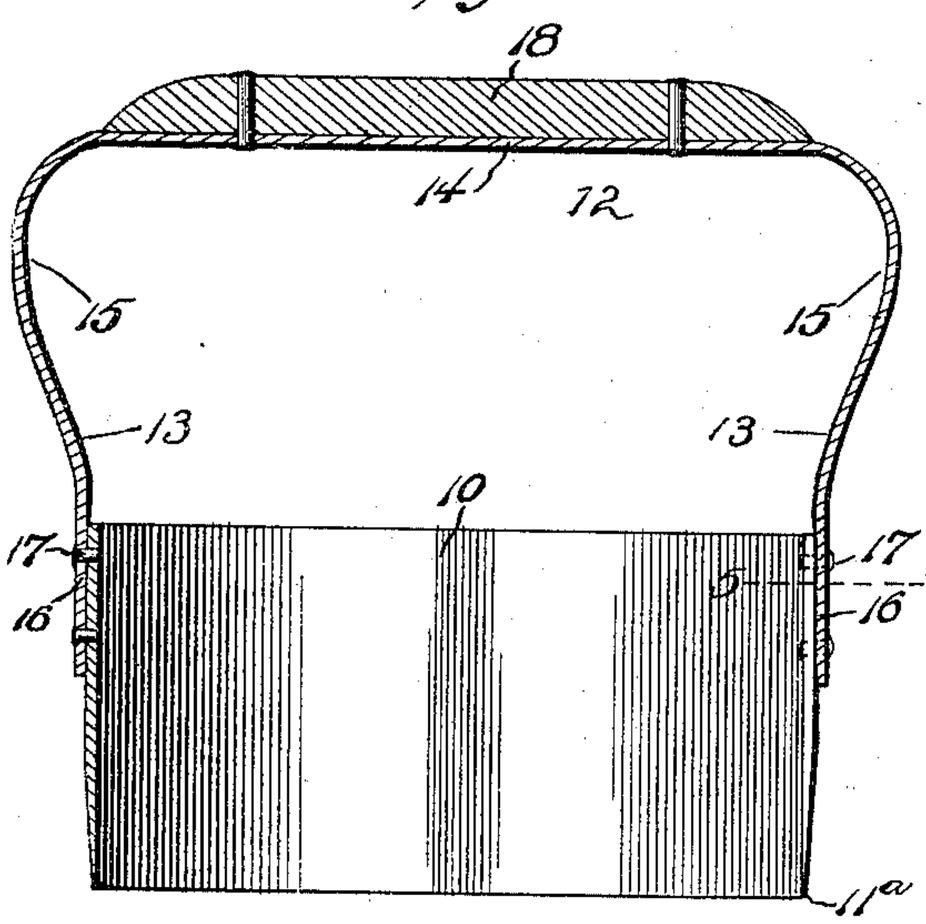
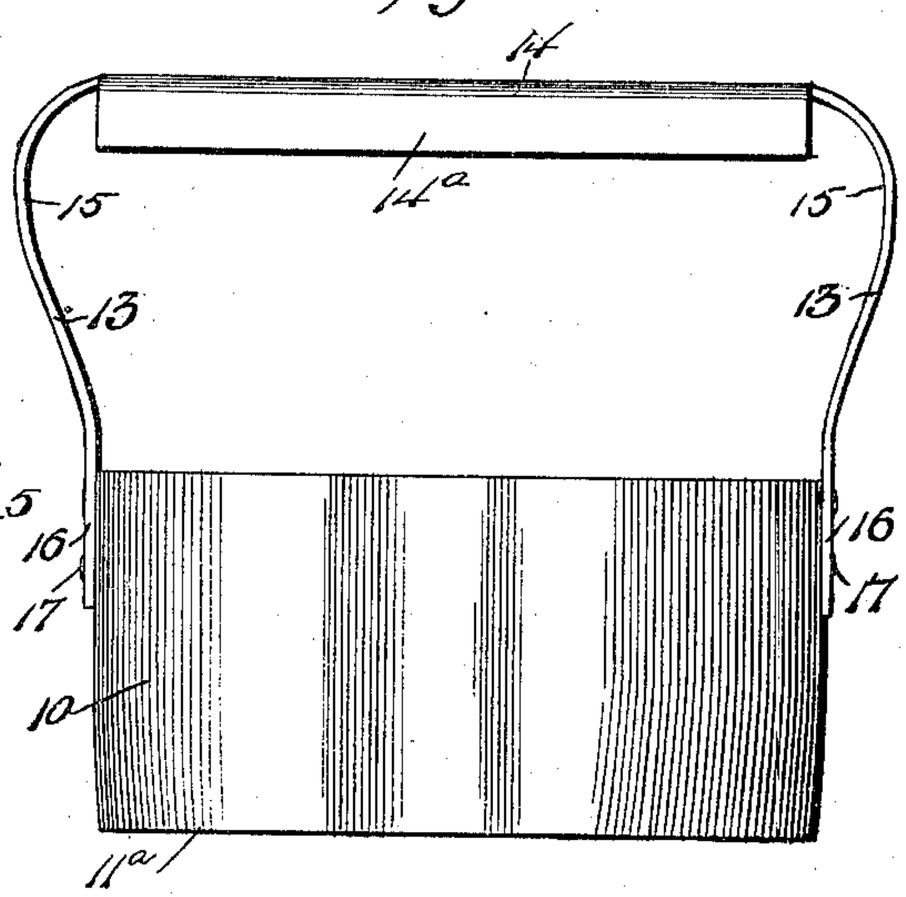


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM S. JENKS, OF HUTCHINSON, KANSAS.

CHOPPING-KNIFE.

SPECIFICATION forming part of Letters Patent No. 634,892, dated October 17, 1899.

Application filed June 13, 1899. Serial No. 720,401. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. JENKS, a citizen of the United States, residing at Hutchinson, in the county of Reno and State of Kansas, have invented a new and useful Chopping-Knife, of which the following is a specification.

My invention relates to improvements in chopping-knives for cutting vegetables and other substances; and the object is to provide a simple construction having a considerable area of cutting edge and yieldable handle to cushion the downstroke of the implement when forcibly struck upon a board, chopping-bowl, or other surface, so as to reduce the shock and jar on the hands of the operator.

With these ends in view the invention consists of the novel construction and arrangement of parts, which will be hereinafter fully described and claimed.

In the drawings, Figure 1 is a perspective view of my improved chopping implement. Fig. 2 is a plan view thereof. Fig. 3 is a vertical cross-section through the annular knife and the bowed spring-handle. Fig. 4 is a side elevation of another embodiment of the invention. Fig. 5 is a detail cross-section through the blade on the line 5 5 of Fig. 3 to show the butt-joint between the ends thereof.

The same numerals of reference are used to indicate like and corresponding parts in each of the several figures of the drawings.

The chopper of my invention consists of a knife 10 and a spring-bow 12. As shown by the drawings, the knife is of circular or annular construction in the form of a ring or band and made by bending a single piece of metal for its ends to abut one against the other to form the butt-joint 11, as shown by Fig. 5, and the lower edge of this annular knife is ground on its outer face to produce a continuous cutting edge 11^a.

The spring-bow 12 is made from a single piece of elastic sheet metal designed to cushion the shock or jar on the hand of the operator when the implement is used by forcibly striking the annular cutting-blade upon a board, chopping-bowl, or other surface. This spring-bow is made from a single continuous piece of elastic sheet metal, and it is peculiarly bent or fashioned to provide the legs 13, the cross-bridge 14, and the curved corners 15. The spring-bow is arranged in a transverse position across the annular knife 10, so that the bridge will span the open space of the knife, and the legs 13 depend from the bridge, so as to be secured to the annular knife at diametrically opposite points. The extremities of the legs 13 are broadened to form the plates 16, which are arranged to overlap the faces of the circular knife at diametrically opposite sides, and said plates of the spring-bow are fastened securely to the knife by means of rivets 17, although any other equivalent fastening means may be adopted.

To securely hold the abutting ends of the circular knife in their proper relation and at the same time contribute to strength and simplicity of the implement, the broad plate 16 at one end of the handle is extended over the butt-joint 11 of the circular knife, as shown by the detail view, Fig. 5 of the drawings. This plate 16 overlaps or extends across the butt-joint of the knife, and rivets 17 are passed through the plate and the knife on opposite sides of the joint 11, whereby the joint is substantially strengthened by the overlapping of the plate 16 and the parts are united in a secure manner.

In the preferred embodiment of my invention I employ a handle 18, which is preferably made of a single piece of wood, with a flat lower face and a curved upper edge. This handle is applied laterally against the bridge 14, and said handle is held in place on the bridge by rivets or other suitable fastening means. I do not, however, confine myself to the employment of a wood handle on the elastic bow, because this handle may be dispensed with, as in the construction shown by Fig. 4. In dispensing with the wood handle the bridge 14 of the spring-bow is adapted to serve the purpose of the hand-grasp when the operator uses the implement; but as the bow is made of a thin piece of plate-like metal it is liable to hurt the operator's hand when the device is used for any considerable length of time. To overcome this objection, it is my purpose to stamp the handle from a single piece of metal in a manner which will provide a bridge-bar 14 that exceeds the width of the parts 13 15, forming integral elements of the handle, and this bridge-bar 14 is curved

in cross-section in order to provide depending flanges 14ª, whereby the handle is formed with a bridge-bar considerably broader, and of curved form in cross-section, than the legs 15, so that the handle will afford a secure grasp to the operator's hands without hurting them. One of the important features of my invention is the employment of the circular knife, and this knife may be made singly or in duplicate, as may be desired. The use of the circular knife provides an extended cutting edge, which increases the effective area of the chopping device and adapts the latter to cut entirely through the substance to the bottom of a rounded bowl, the rounded surface of a chopping-block, or flat surface of a table. The extreme thinness of the circular knife allows it to cut very easily, and such a knife has practically double the capacity of a straight knife.

Another feature of my implement resides in the construction of the spring-bow in which the corners 15 are extended or prolonged so as to lie beyond the vertical planes of the legs 13, which are fastened to the annular knife. This construction provides for the desired elasticity in the spring-bow, so as to make the latter yield or give when the knife is struck forcibly upon a chopping-block, bowl, or other surface. It is well known to those familiar with the use of chopping-knives that a rigid structure causes all the jar due to impact of the knife upon the surface to be transmitted to the operator's hands and arms, and when a rigid knife is used for any considerable length of time the operation of chopping vegetables or other substances becomes very tiresome by reason of the shock upon the hands and arms of the operator. I minimize the fatigue and labor of chopping vegetables by the improved construction of the spring-bow, which, as heretofore indicated, will yield or give, so as to cushion the impact of the knife upon the board or other surface. My device is extremely simple in construction, because it consists practically of three pieces which are readily made assembled and attached, and said device is, furthermore, cheap of construction and efficient in operation.

To adapt the device for use in hotels and other places where considerable chopping of vegetables or the like is required, the area of the cutter may be increased by employing a series of these cutters, which are suitably connected together and are attached to a common spring-bow handle.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claim may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what I claim is—

As a new article of manufacture, a chopping-knife consisting of an annular blade having a cutting edge, and a yieldable elastic bow comprising a bridge-piece arranged to span the knife and provided with flat legs which are fastened to opposite sides of the blade, said yieldable bow having the curved corners between the bridge and legs extended beyond the vertical plane of said legs and blade, and the sides of the bridge-piece being extended beyond the sides of the legs and bent downwardly to form a grip.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM S. JENKS.

Witnesses:
I. D. SLACK,
J. H. KINGKADE.