

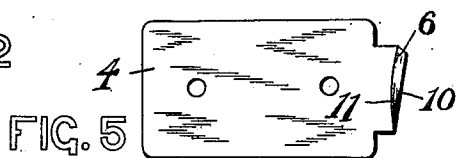
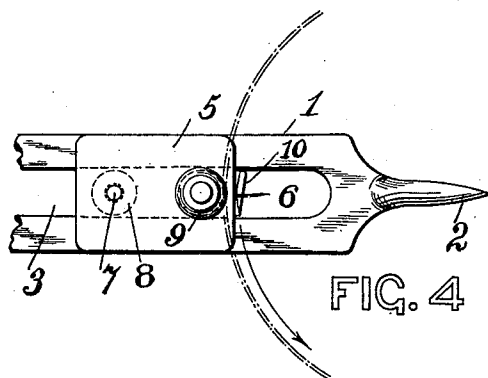
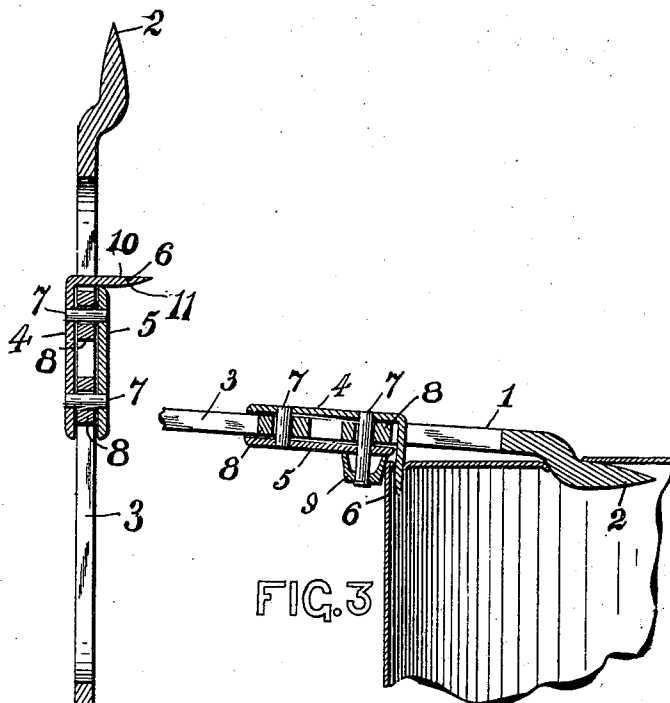
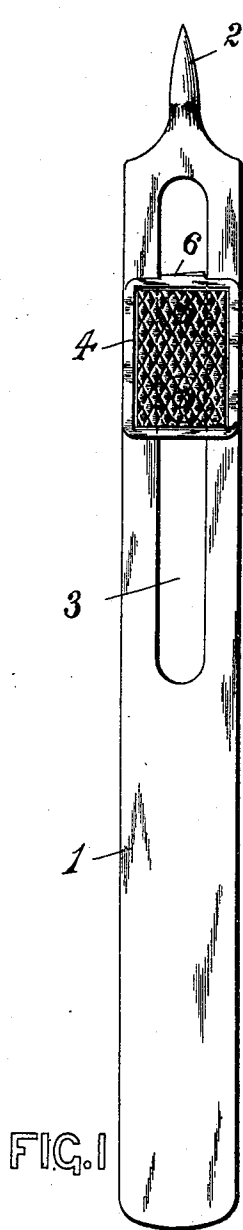
No. 669,375.

Patented Mar. 5, 1901.

E. D. WOODS.  
CAN OPENER.

(Application filed Aug. 11, 1900.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

EDWARD D. WOODS, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND  
FRANK WHITE, OF SAME PLACE, AND BYRON R. BACON, OF SOUTH  
ORANGE, NEW JERSEY.

## CAN-OPENER.

SPECIFICATION forming part of Letters Patent No. 669,375, dated March 5, 1901.

Application filed August 11, 1900. Serial No. 26,562. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD D. WOODS, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Can-Openers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

The present invention has reference to a novel construction of can-opener, and refers more particularly to that class of can-openers which are provided with a piercing end and with a sliding blade-holder which is adapted to the different sizes of cans.

The objects of my present invention are, first, to provide a can-opener the sliding blade-holder of which is free to slide along a slot in the shank and which will travel around near the outer edge of the top of the can even if the piercing end of the can-opener has not been placed directly in the center of the top.

Another object of my invention is to provide a novel construction of blade that will cause the cut to be concentric to the edge of the can and to also curl the edge of the can downward and inward to form a bead to prevent the liability of the tearing or abrading of the hand.

Another object is to provide an opener that is quickly adjusted to the different sizes of cans and one that is simply operated and cheaply constructed.

The improved opener is illustrated in the accompanying drawings, in which—

Figure 1 a top view of my improved can-opener, and Fig. 2 is a longitudinal section of the same. Figs. 3 and 4 are a section and bottom view of a slightly-modified form of construction, and Fig. 5 is a bottom view of the upper plate of the blade-holder slightly enlarged to illustrate the construction of the blade.

In said drawings, 1 is the plate or shank of the can-opener, which is provided at one end with the piercing-point 2, which is slightly out of alinement with, but parallel to, the shank,

and said shank is also provided with a slot 3, which extends longitudinally thereof and is adapted to guide the blade-holder. The blade-holder consists of the two plates 4 and 5, which are placed on the top and bottom, respectively, of the shank 1. The plate 4 is provided with a lip or tongue 6, which is bent down through the slot 3 and projects from the under side of the shank and forms a blade or cutter the peculiar construction of which will be described hereinafter.

The plates 4 and 5 are secured by means of the pins or rivets 7, which pass through the slot 3 and act as shafts for the rollers or washers 8, which fit loosely on said pins 7 and roll freely in the slot, thereby insuring a free movement of the blade-holder along the shank.

The blade 6 is arranged at an obtuse angle to the longitudinal axis of the shank, as will be seen from the bottom view of the same in Fig. 5, thereby throwing the nose or cutting edge a little toward the outer edge of the can. Now when the shank, and consequently the blade-holder and its blade, is being operated, with the piercing-point 2 as a fulcrum, the resistance of the material being cut against the face 10 of the cutter will make it travel outward or, rather, away from the center. The opposite face 11 of the blade is rounded or beveled to cause the edge of the can when being cut to curl down and inward, and thus leave an edge after the cut is completed that is smooth and free from any sharp edges, which are apt to injure the hands. The tilt or angle of the blade is sharp enough to cause the blade to curl the outer edge of the cut and to maintain itself away from the center.

The modification, as shown in Figs. 3 and 4, is the same construction, but is provided with an additional roller or wheel 9 on one of the shafts 7, which roller is preferably provided with sloping rim or, rather, the shape of a truncated cone, which allows of its quick adjustment to the edge of the can-top. The roller 9, as will be evident from Fig. 3, is adapted to roll around the edge of the top and maintain the blade at the same distance from the edge of the can all around. The point is used as a pivot or fulcrum for the can-opener, as will be evident, and acts to retain the detached cover after it is cut.

The advantages of my new construction of can-opener will be evident. In the constructions as heretofore made the blade-holder is adjustable, but after being adjusted is secured or held in its adjusted position, which insures a perfectly-round cut in relation to the point of the can-opener; but if the point was not inserted directly in the center of the top the opening to the top of the can would be eccentric.

In the present construction the angle of the blade causes it to continually bear outward, partly counteracted by the beading or curling being done by the rounded or bulged side of the cutter and limited by the bead being formed. Consequently the cutter will travel in a path concentric to the top of the can, and if the piercing-point has been inserted away from the center the cut will be eccentric in relation to said point. The beaded or curled edge of the opening makes a neat and finished appearance after the top is removed or thrown back.

The upper plate 4 of the blade-holder may be roughened to prevent slipping of the thumb if it is desired to hold the blade-holder rigid while cutting.

Having thus described my invention, what I claim is—

1. A can-opener, comprising a shank, a piercing-point on one end thereof, a slot in said shank, a blade-holder sliding in said slot and embracing the shank, a blade projecting through the slot and arranged at an obtuse angle thereto, and having a bulged or rounded outer face, substantially as described.

2. A can-opener, comprising a shank, a piercing-point on one end thereof, a slot in said shank, a blade-holder, comprising a pair of plates embracing said shank and guided by said slot, pins or rivets securing said plates, a lip on the upper plate bent down and through said slot to form a blade, said blade being bent at an obtuse angle to the longitudinal axis of said shank, substantially as described.

3. A can-opener, comprising a shank, a piercing-point on one end thereof, a slot in said shank, a blade-holder, comprising a pair of plates embracing said shank and guided by said slot, pins or rivets securing said plates, a lip on the upper plate bent down and through said slot to form a blade, said blade being bent at an obtuse angle to the longitudinal axis of said shank and having a bulged or rounded outer face, substantially as described.

4. A can-opener, comprising a shank, a piercing-point on one end thereof, a slot in said shank, a blade-holder comprising a pair of plates embracing said shank, pins or rivets securing said plates, rollers on said pins and in said slot, a blade secured to said blade-holder and projecting through the slot and arranged at an obtuse angle to the longitudinal axis of the shank, substantially as described.

5. A can-opener, comprising a shank, a piercing-point on one end thereof, a slot in said shank, a blade-holder comprising a pair of plates embracing said shank, pins or rivets securing said plates, rollers on said pins and in said slot, a lip on the upper plate bent down and through said slot to form a blade, said blade being bent at an obtuse angle to the longitudinal axis of the shank, substantially as described.

6. A can-opener, comprising a shank, a piercing-point on one end thereof, a slot in said shank, a blade-holder comprising a pair of plates embracing said shank, pins or rivets securing said plates, rollers on said pins and in said slot, a lip on the upper plate bent down and through said slot to form a blade, said blade being bent at an obtuse angle to the longitudinal axis of the shank, and having a bulged or rounded outer face, substantially as described.

7. A blade-holder, comprising a pair of plates adapted to embrace the shank of a can-opener, guide-rollers between said plates, pins or rivets securing said plates, and acting as shafts for said rollers, the upper plate being provided with a lip bent at right angles thereto and projecting beyond the lower plate and bent at an obtuse angle to the longitudinal axis of the shank, the inner face of said blade being flat and the outer face being bulged or rounded, substantially as described.

8. A can-opener, comprising a shank, a piercing-point on one end thereof, a slot in said shank, a blade-holder comprising a pair of plates, pins or rivets securing said plates and acting as shafts for rollers arranged between said plates, said rollers running in said slot, a lip on the upper plate bent down through said slot and beyond the lower plate to form a blade, a rounded or bulged outer face on said plate, and a wheel or roller on one of said pins or rivets to maintain the blade an even distance from the edge of the can, substantially as described.

9. A can-opener, comprising a shank, a piercing-point on one end thereof, a blade-holder sliding on said shank, a blade secured to said blade-holder, and arranged at an obtuse angle to the longitudinal axis of the shank, substantially as described.

10. A can-opener, comprising a shank, a piercing-point on one end thereof, a blade-holder sliding on said shank, a blade secured to said blade-holder, and arranged at an obtuse angle to the longitudinal axis of the shank, and having a bulged or rounded outer face, substantially as described.

In testimony that I claim the invention set forth above I have hereunto set my hand this 12th day of July, A. D. 1900.

EDWARD D. WOODS.

Witnesses:

HENRY MEYER,  
BYRON R. BACON.