No. 799,119. PATENTED SEPT. 12, 1905.

T. A. WATROUS.

CAN OPENER.

APPLICATION FILED JAN. 16, 1905.

Fig. 1.

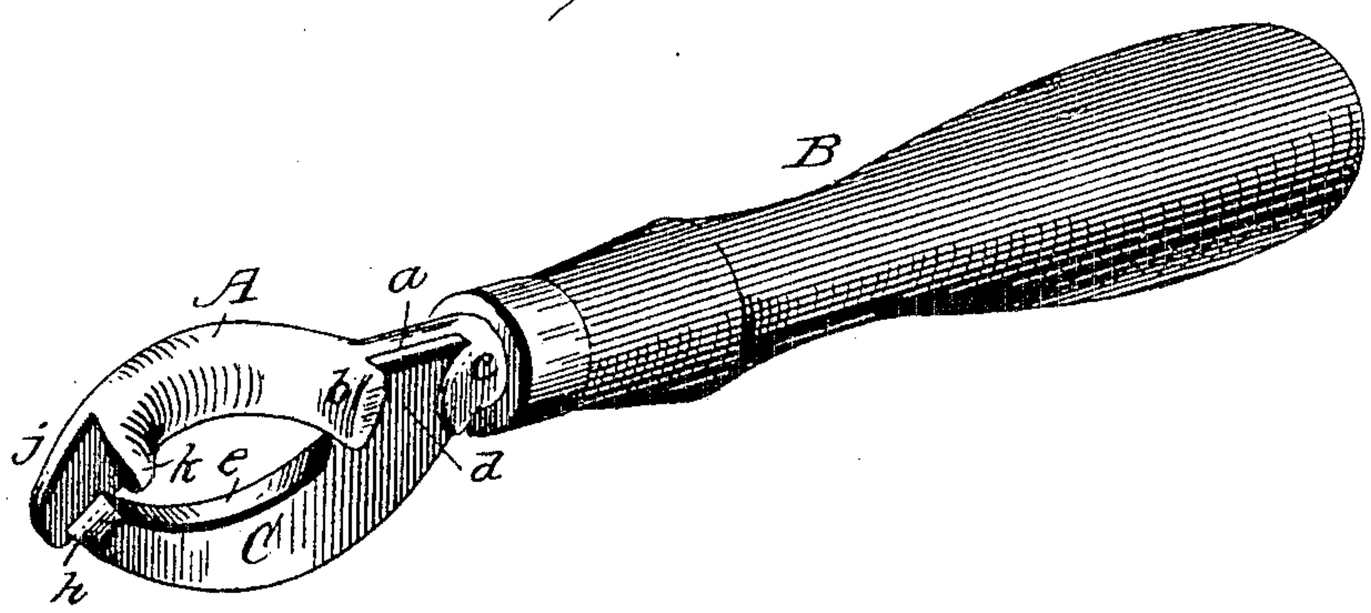


Fig. 2.

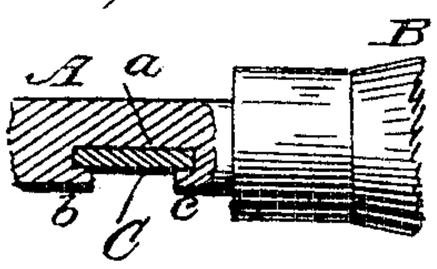


Fig. 3.

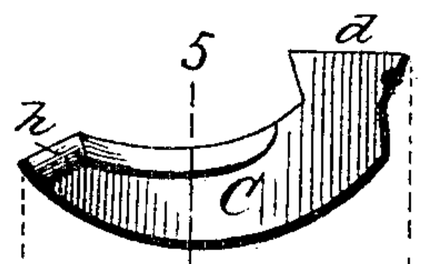


Fig. 4.

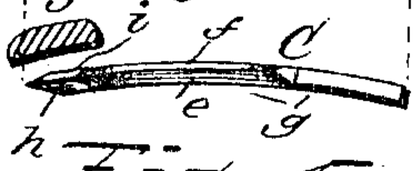
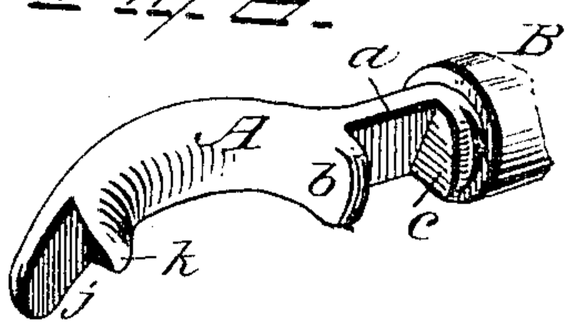


Fig. 5.

Fig. 6.



WITNESSES

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CAN-OPENER.

No. 799,119. Specification of Letters Patent. Patented Sept. 12, 1905.

Application filed January 16, 1905. Serial No. 241,328.

To all whom it may concern:

Be it known that I, THOMAS A. WATROUS, a citizen of the United States, residing at Elmira, in the county of Chemung and State of New York, have invented certain new and useful Improvements in Can-Openers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has for its object to provide a can-opener in which the blade is securely held to the stock without the aid of rivets, screws, or other like fastenings and to form a lateral bend or curve in the blade, so that the same will bear closely against the inner or concave side of the can, and, further, to provide a guard to the point of the knife, which will also serve as a guiding-flange, thereby obtaining a tool of the above character that will possess strength and durability, simple in operation, as well as combining many points of excellence over the can-openers of ordinary construction.

The invention consists in a can-opener constructed substantially as shown in the drawings and hereinafter described.

Figure 1 of the drawings is a perspective view of a can-opener constructed in accordance with my invention; Fig. 2, a detail horizontal sectional view through the fan-shape portion of the stock and blade; Fig. 3, a detail plan view of the cutting-blade; Fig. 4, an edge view of the cutting-blade to show the lateral curve thereof; Fig. 5, a cross-section of the blade, taken on line 5 5 of Fig. 3 to show the bevel on opposite side thereof; Fig. 6, a perspective view of the stock as it will appear previous to securing the blade thereto.

In the accompanying drawings, A represents the stock of the can-opener, which may be constructed of any suitable metal and of any preferred size, said stock being provided with a handle B.

The stock A has an outward curve and is formed with a fan-shape seat *a*, and upon each side thereof are fastening-lugs *b c*, and the knife C has a fan-shape tongue *d* to correspond in form to the seat in the stock. After the fan-shape tongue *d* is engaged with the correspondingly-formed seat *a* the fastening-lugs *b c* are bent down against the outer face of the tongue with sufficient pressure to firmly hold the knife in place and stationary.

The cutting portion of the blade C is preferably beveled mostly upon the concave side, as shown at *e f* in Fig. 5 of the drawings, which serves to accentuate the effect of the side curvature, as indicated at *g* in Fig. 4 of the drawings, and makes the knife cut closer to border of can. The side or lateral curvature, as above set forth and shown in Fig. 4 of the drawings, extends the whole length of the blade and adapts it to fit up closely against the inner or concave side of the can, the curvature of the knife conforming substantially to the curvature of the interior of the can, thereby cutting close to the outer edge thereof, and thus removing the entire top. The knife-point is also beveled upon both its sides, as shown at *h i*, to facilitate entering the point through the metal of the can-top, thus adding to the blade many points of excellence. The stock A is formed with a guard *j*, which extends down opposite the point of the knife and slightly below the same, thereby guarding the hands from injury from the sharpened edge of the point. It will be seen, therefore, that the knife-point will come close to the edge of the can, after which a light blow or two upon the handle will drive the point through the metal and, in connection with the lateral curve of the blade, which will fit closely against the inner or concave side of the can, makes a close cut not only possible but inevitable, the guard also serving the double purpose as a guard and a guiding-flange.

The knife-blade, as hereinbefore described, has two different curvatures—a curvature on the arc of a circle, which I will term a "segmental" blade, and in addition thereto a curve or bend laterally, and this, in connection with the flat or straight point with bevels upon both its sides, as well as beveling both sides of the blade from point to heel, renders the blade perfect in its action, and the manner of connecting the blade to the stock without the necessity of perforation, and consequently weakening the same, gives greater strength and durability to the tool.

The guard *j*, which extends below the plane of the knife-blade point is of such distance in relation thereto that a space is left between the two, as shown in Fig. 4 of the drawings, and the stock is formed with a suitable fulcrum *k* to bear against the edge of the can-top.

In further reference to the segmental form of the cutting edge of the blade it will be noticed that said cutting edge is on a line of a circle or a segment of a circle, and when the blade is thrust through the can-top its full

limit the knife edge will strike the cover of the can at the right angle to cut easy even when the knife is in a nearly horizontal position and will continue to engage the cover or can-top at practically the same angle when the leverage is lifted, which enables it to successfully operate from start to finish.

The lateral curvature of the knife-blade its entire length not only enables it to fit up closely against the concave side of the can, but to bring the cutting edge to an eccentric line, so as to cause the knife to turn over slightly to the right, which has the effect to cause the knife to hug the side of the can.

The grinding or beveling of the knife mostly on the concave side, except at the point, serves to accentuate the effect of the side curvature and makes it cut closer to border of the can.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A can-opener comprising a stock and handle therefor, said stock having a fan-shape seat and a fastening-lug upon each side thereof, and a cutting-blade having a fan-shape tongue corresponding in form to the seat and held thereon by the fastening-lugs bent down upon the same, substantially as and for the purpose set forth.

2. A can-opener comprising a curved stock and handle therefor, said stock having a guard and a fulcrum and a fan-shape seat with fastening-lugs, and a laterally-curved cutting-blade having a fan-shape tongue to engage the seat and held thereon by the lugs bent down against the blade, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS A. WATROUS.

Witnesses:
MARY E. MURPHY,
LAURA F. MALONEY.