No. 669,322. Patented Mar. 5, 1901.

W. A. HUNTER.

CAN OPENER.

(Application filed June 12, 1900.)

(No Model.)

Fig. 1.

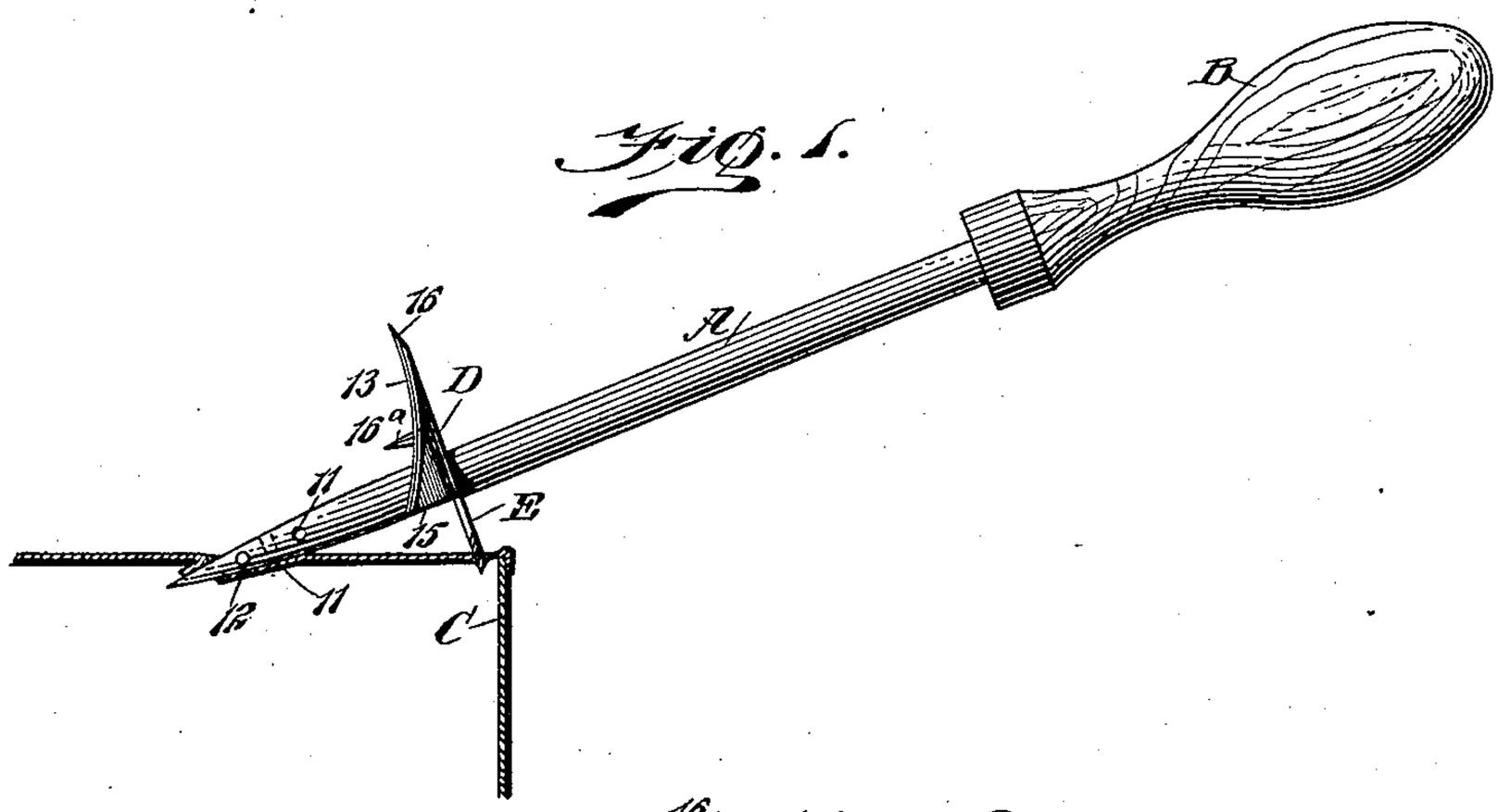


Fig. 2.

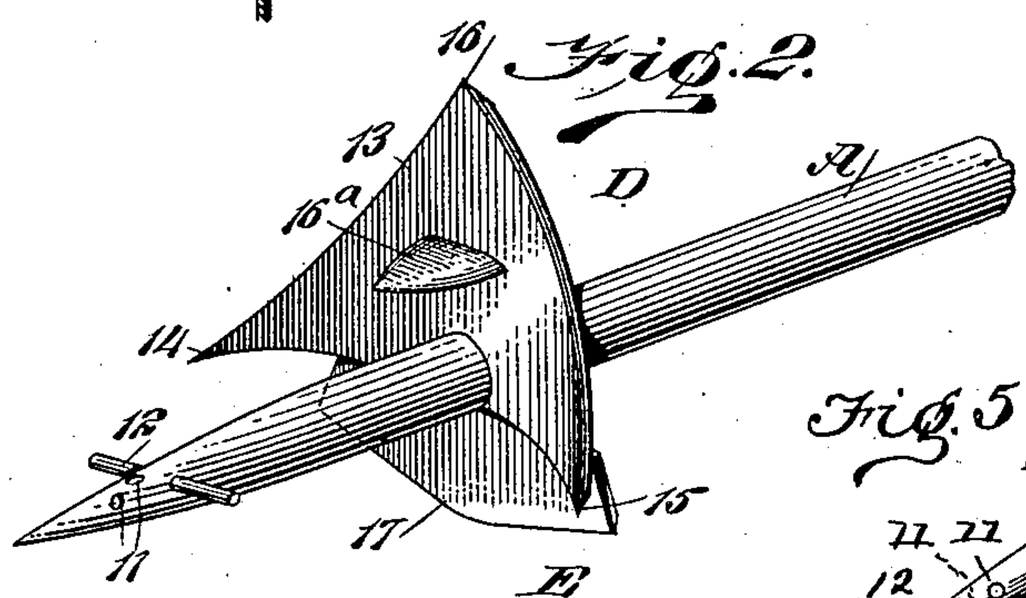


Fig. 5

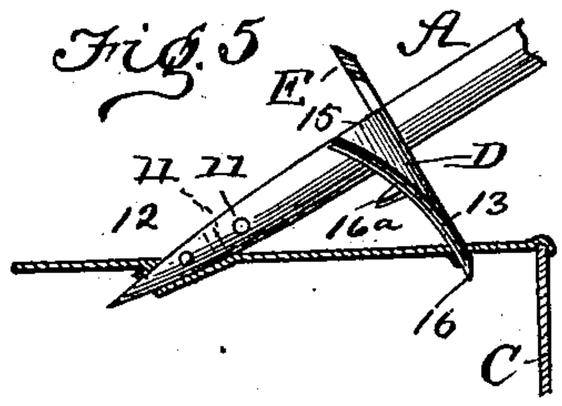


Fig. 3.

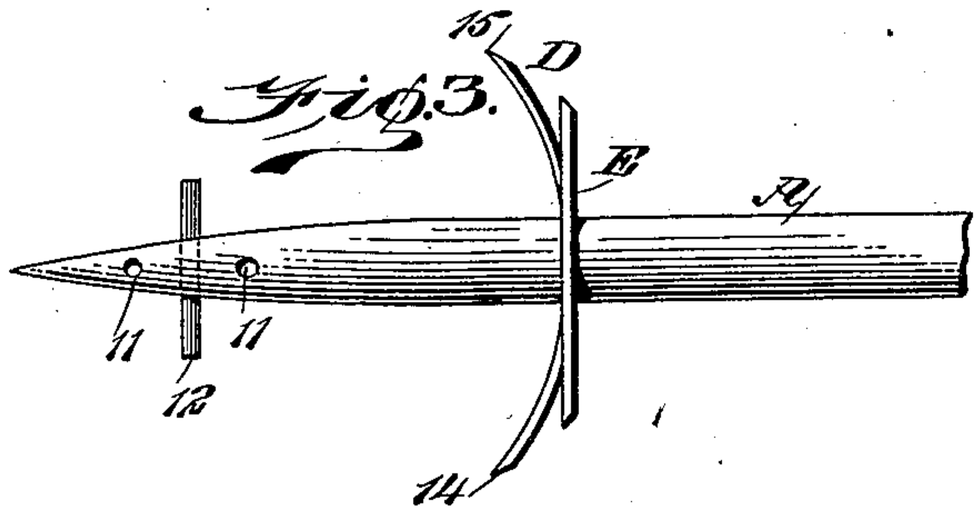
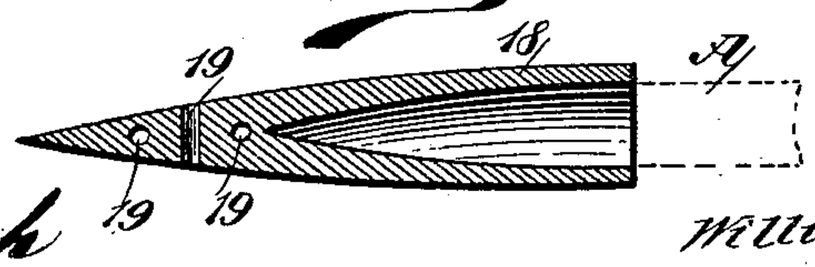


Fig. 4.



WITNESSES:

H. G. Dieterich

J. Fred Acker.

INVENTOR

William A. Hunter.

BY Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM ALEXANDER HUNTER, OF ONEONTA, NEW YORK.

CAN-OPENER.

SPECIFICATION forming part of Letters Patent No. 669,322, dated March 5, 1901.

Application filed June 12, 1900. Serial No. 20,003. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ALEXANDER HUNTER, a citizen of the United States, and a resident of Oneonta, in the county of Otsego and State of New York, have invented certain new and useful Improvements in Can-Openers, of which the following is a full, clear, and exact description.

One purpose of the invention is to provide a can-opener which can be successfully used in connection with polygonal or with round cans and manipulated so as to cut the head of a can close to the sides of said can or at any desired distance therefrom and which device may be employed to make a right or a left hand cut on a prescribed circle cut at any place in a can.

Another purpose of the invention is to so construct the device that its pivot-point may be extended in order to accommodate said device to large-sized cans.

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 side elevation of the opener, illustrating it as applied to a can of rectangular shape. Fig. 2 is a perspective view of that portion of the opener at which the blades are located, the view being on an enlarged scale. Fig. 3 is a bottom plan view of that portion of the device shown in Fig. 2. Fig. 4 is a vertical section through an extension-tip adapted to be used in connection with the main bar of the opener. Fig. 5 is a side elevation of the outer end portion of an opener, illustrating it in a position the reverse of that shown in Fig. 1 and applied to a circular can, a portion of the top and the side of the latter appearing in section.

A represents a bar which is circular in cross-section and whose outer end is tapering and is brought to a point, the opposite end of the bar A being suitably fitted in a handle B. At the pointed end of the bar A horizontal and vertical openings 11 are made, and any one of these openings is adapted to receive a cross-bar 12, which limits the depth to which the pointed end of the body-bar A shall enter a can, as in the operation of the device the pointed end of the body-bar is pressed into the can-head, for example, penetrating said head, and then the body of the device is given any necessary inclination for the successful operation of the cutters D and E.

The cutters D and E are oppositely placed on the body bar or rod A at a point between the center of the said bar and its pointed end. The cutter D consists of a blade 13, which is of substantially triangular shape, and the outer surface of this blade 13 or the surface which faces the point of the body-rod A is curved or concaved to such an extent that the outer end portions 14 and 15 of the said cutter are decidedly curved in direction of the pointed end of the body, as the base portion of the blade 13 is that which is secured centrally to the body bar or rod A, as shown best in Fig. 2. The upper point 16 of the blade 13, however, is substantially vertical or at right angles to the body-bar A, and the side edges of the blade 13 are beveled at the side of the blade which faces the handle B. Either cutting-point 14 or 15 may be introduced into the head of a can, for example, and consequently the cutter may be used either right-handed or left-handed, and when the cutting-points 14 and 15 are used the cutter will make a kerf in the head of the can a slight distance from the marginal edge. However, if it be desirable to cut the head close to the marginal edge of the can the device is turned so that the point 16 shall be brought into action. An additional cutter 16^a is located on the concaved face of the blade 13 of the cutter D, and this auxiliary cutter 16^a is at right angles to the main blade 13 and is adapted to be brought into action when the body-bar A is introduced into the head of a can in a vertical position or in a side of a can in a horizontal position and serves to cut a circular piece of prescribed diameter from the portion of the can to which the device is applied. The cutter D is adapted for use in connection with circular cans.

When the can C is of rectangular or polygonal form, for example, as shown in Fig. 1, another form of cutter is necessary to partially or entirely remove the head. This second cutter E is attached to the body-bar A at

the opposite side to that at which the cutter D is secured, and the cutter E consists of a suitable blade which extends beyond opposite sides of the body-bar back of the base of the blade 13 of the opposing triangular cutter D, and said cutter E is provided with a lower cutting edge 17, which is beveled or inclined in opposite directions from a central point, and the cutting edge of the cutter E is beveled at the back. When the device is to be used in connection with a can of polygonal or rectangular shape, the point of the body-bar A is introduced into the head of the can, and the body-bar is then pressed down with sufficient force to carry the cutting edge 17 of the cutter E through the can, as shown in Fig. 1, and by gradually moving the device in direction of one side or other of the can the head of a square or polygonal can may be quickly and cleanly cut out.

The body-bar A is of such length as to render it successfully applicable to cans of medium size; but when the cutter is to be used in connection with a can of extra size it is desirable that the body-bar shall be extended, and to that end I provide a ferrule 18, (shown in Fig. 4,) having an interior chamber which neatly receives the pointed end of the body-bar A when the pin or bar 12 is removed, and this ferrule 18 is provided with a tapering or pointed outer end corresponding to the similar end of the body-bar. The pointed or tapering end of the ferrule has apertures 19 produced therein to receive the pin or bar 12, and which correspond to the apertures 11 made directly in the body-bar.

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

1. A can-opener, comprising a body-bar having a tapering outer extremity, a substantially triangular blade secured at its base to the body-bar, the outer face of the said blade or the face which is directed to the point of the body-bar, being so curved at its base portion that cutting-points are formed where the sides of the blade connect with the base, which cutting-points curve decidedly in direction of the pointed end of the body-bar, the upper point of the said blade being substantially at a right angle to the body-bar, for the purpose set forth.

2. A can-opener, comprising a body-bar having a tapering outer extremity, a substantially triangular blade secured at its base to the body-bar, the outer face of the said blade or the face which is directed to the point of the body-bar, being so curved at its base portion that cutting-points are formed where the sides of the blade connect with the base, which cutting-points curve decidedly in direction of the pointed end of the body-bar, the upper point of the said blade being substantially at a right angle to the body-bar, an auxiliary cutting-blade located on the front face of the triangular blade, and a pin adapted to limit the extent to which the body-bar shall enter the can, which pin is adjustably placed at the pointed end of the said body-bar.

3. A can-opener, consisting of a body-bar having a pointed end adapted to enter a can, a substantially triangular blade secured at the central portion of its base to the body-bar at the rear of its pointed end, which blade has its base portion concaved at the front, forming extreme outer cutting-points, the upper edge of said blade, which is also provided with a cutting-point, being practically at right angles to the body-bar, and a second blade secured about centrally to the body-bar at a point adjacent to the base of the triangular blade and on the opposite side of the body-bar, the said second blade being at the rear of the base of the said triangular blade, and the cutting edge of the second blade being inclined from its center in direction of its outer edges, for the purpose described.

4. In a can-opener, a body-bar provided with cutting-blades, the said body-bar being tapering at its outer end and provided with apertures at said end and a limiting-pin to pass through the said apertures, and an extension-tip having an interior chamber which receives the pointed end of the body-bar, the outer end of the said extension-tip being pointed and provided with apertures adapted to receive the said limiting-pin, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM ALEXANDER HUNTER.

Witnesses:
DAVID J. YAGER,
W. B. S. PAUL.