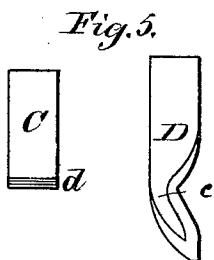
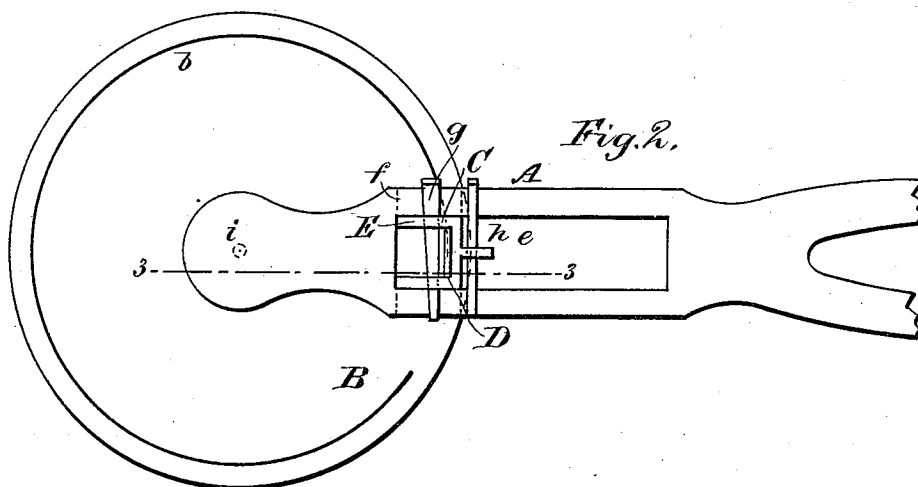
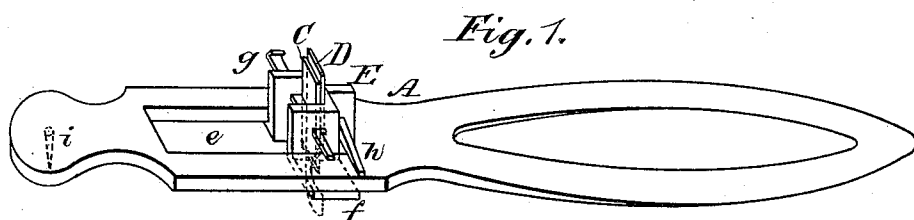


(No Model.)

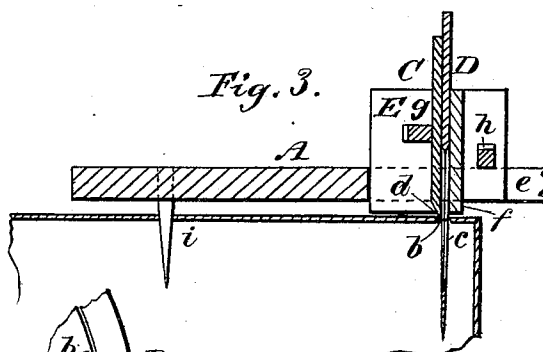
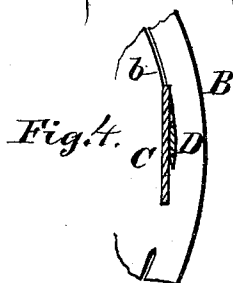
J. P. SMITH.
CAN OPENER.

No. 466,193.

Patented Dec. 29, 1891.



WITNESSES:
W. M. Twitchell.
C. Sedgwick



INVENTOR:
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UNITED STATES PATENT OFFICE.

JOHN P. SMITH, OF PHILADELPHIA, PENNSYLVANIA.

CAN-OPENER.

SPECIFICATION forming part of Letters Patent No. 466,193, dated December 29, 1891.

Application filed May 6, 1891. Serial No. 391,768. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. SMITH, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Can-Openers, of which the following is a full, clear, and exact description.

This invention relates to openers or opening devices for hermetically-sealed metal cans, such as fruit, fish, flesh, and other preserve cans of cylindrical shape; and the invention consists in a hand tool or cutter for such purpose, in which two knives are used, the same including an adjustable knife-carrier to adapt the device to different-sized cans, a means of centering the cutting device, and other features, substantially as herein-after described, and more particularly pointed out in the claims.

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

Figure 1 represents a view in perspective of my improved can-opener. Fig. 2 is a plan of the same as applied to the can and as about finishing the opening cut in the metal top of the can. Fig. 3 is a vertical section, on a larger scale upon the line 3 3 in Fig. 2. Fig. 4 is a sectional plan view in part showing the relative arrangement of the two knives, and Fig. 5 is a side view in elevation of the two knives detached.

A is the bar or handle portion of the tool, which carries the knives, and which, as in other can-openers, is designed to be rotated by hand around the metal top or end of the can B or the can turned or rotated beneath it to make the necessary opening *b*. This bar or handle A carries two knives C D, arranged to lie side by side, the outer one of which D projects below the other, and is of curved form on its cutting-edge *c*, while the other or shorter and inner knife C presents a straight cutting-edge *d*, parallel or thereabout with its side. The outer knife D, when the tool is in operation, enters and projects down within the can to make the necessary curved cut *b* in the end of the can, while the other knife C, with its straight edge, makes a straight cut over the upturned inner edge of the cut to give a smooth incision within the end of the

can, which a single knife could not do. Both of these knives C D are carried by one and the same sliding carrier E, entered up through a longitudinal slot *e* in the bar A, and provided with a lower flange *f* beneath said bar. Said knives are held in place by a tapering key *g*, passing through the carrier above the bar, and the carrier itself held in place by another tapering key *h* above and resting on top of the bar. By thus securing the knives and their carrier the knives may readily be taken out and be resharpened or replaced, as required, and the carrier holding both knives may be adjusted along the slot *e* to adapt the tool to different diameters of cans. The inner end of the bar or handle A is provided with a lower spike-like projection forming a pivot *i* for said bar or handle, and which is designed to project into the top or end of the can at its center and which the arrangement of the knives facilitates the adjustment of.

In cutting, the curved knife D is placed close to the edge of the can at its top. Then, with the opener held in position, as shown, over the top or end of the can, pressure is brought to bear lightly upon the inner end of the bar or handle A over the pivot-pin *i* to pierce the top of the can at its center, after which the outer end of the bar or handle A is pressed downward and the curved knife D made to penetrate the top of the can and the straight-edged blade C to rest firmly down upon it. The opener may then be rotated or the can turned or rotated beneath it as rapidly as desired to produce the necessary cut *b* in the top of the can, and which the two knives will make perfectly smooth.

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

1. A can-opener comprising a handle provided with two adjoining knives of unequal lengths and adapted to operate simultaneously, substantially as and for the purpose set forth.

2. The combination, with the bar or handle of the can-opener, of the two knives of curved and straight configuration on their cutting-edges, respectively, arranged side by side and projecting the one below the other, and a pin on the under side of the inner end or portion of the handle adapted to penetrate

the can-top at its center and to serve as a pivot for the handle or bar, essentially as set forth.

3. The combination, with the bar or handle
5 of the can-opener having a penetrating pivot-pin on the under side of its inner end or portion, of the two knives of curved and straight configuration on their cutting-edges, respectively, arranged side by side and projecting
10 one below the other, and a carrier common to both knives, adjustable within or along the handle to a greater or less distance from the pivot-pin.

4. The combination, with the bar or handle
A, having a longitudinal slot *e* and a penetrating pivot-pin *i* at or near its inner end, of
15 the sliding carrier E, adjustable along said slot, the two knives C D, carried by said carrier, and the keys *g h*, adapted, respectively, to secure the two knives within the carrier
20 and the adjustable carrier to its place, substantially as shown and described.

JOHN P. SMITH.

Witnesses:

GEORGE L. HORN,
FRANK W. NEWBOLD.