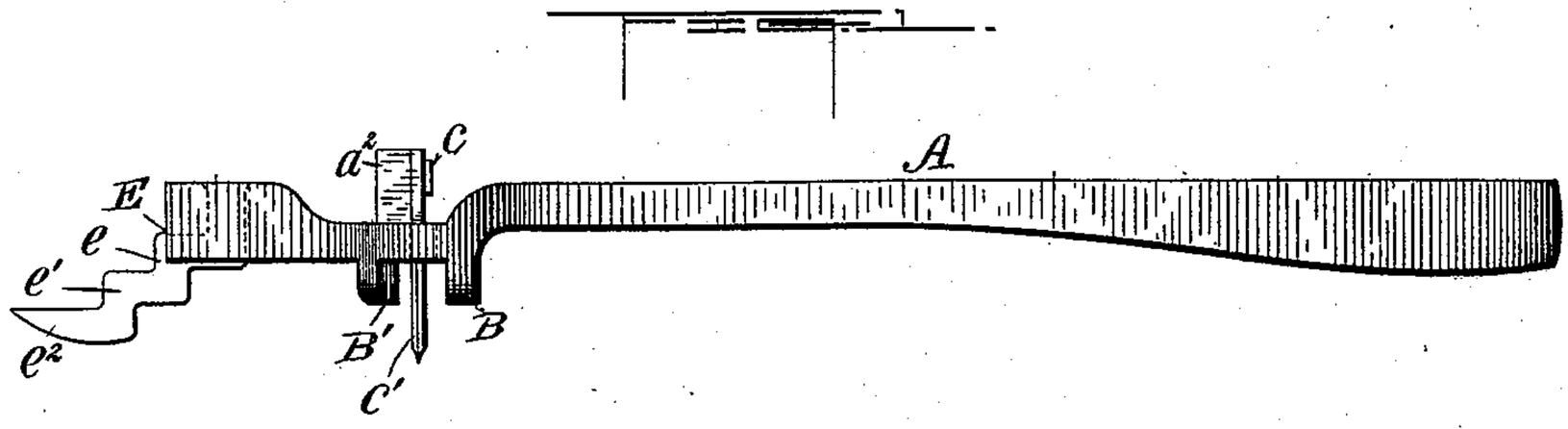
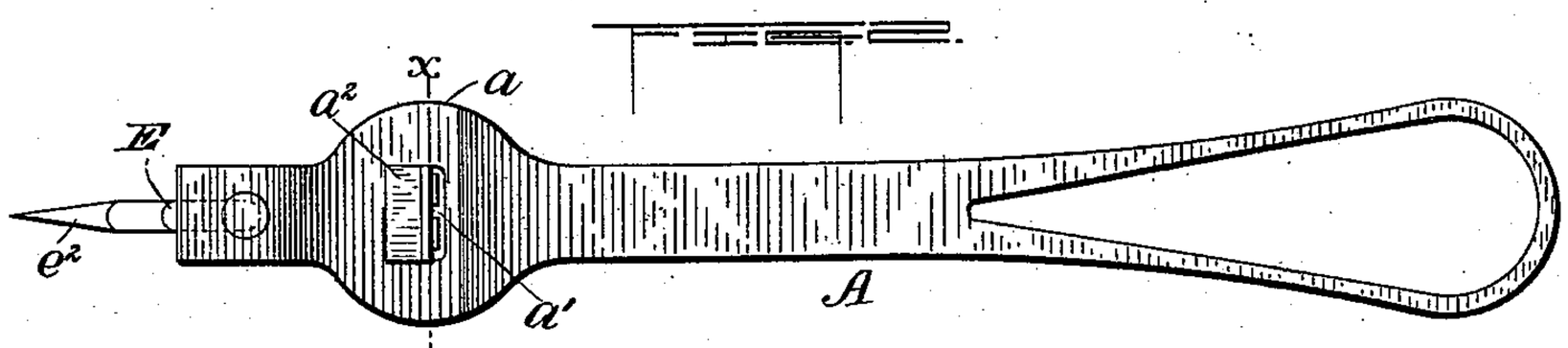
(No Model.)

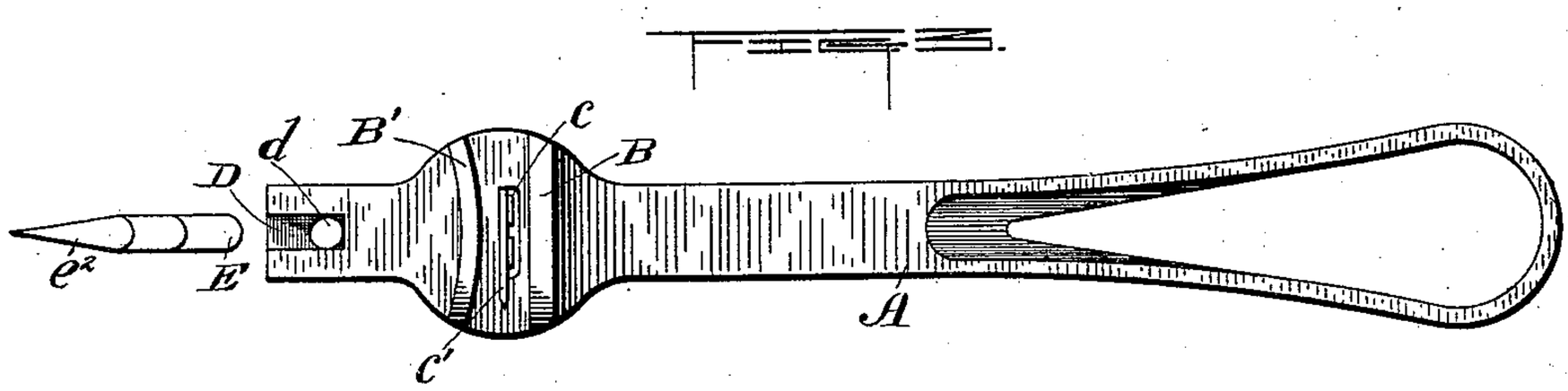
A. B. SCHOFIELD.

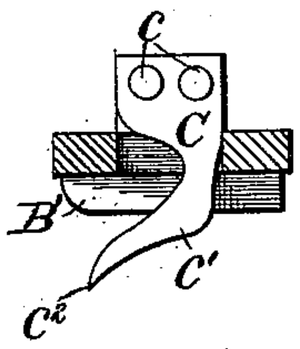
CAN OPENER.

No. 471,776. Patented Mar. 29, 1892.









Witnesses.
Robert Bacon Seward.
George Barry.

Inventor.
Albert B. Schofield
by his attorneys,
Brown Seward

UNITED STATES PATENT OFFICE.

ALBERT B. SCHOFIELD, OF BROOKLYN, NEW YORK.

CAN-OPENER.

SPECIFICATION forming part of Letters Patent No. 471,776, dated March 29, 1892.

Application filed January 18, 1892. Serial No. 418,456. (No model.)

To all whom it may concern:

Be it known that I, ALBERT B. SCHOFIELD, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Can-Openers, of which the following is a specification.

My invention relates to an improvement in can-openers, in which a cutter fixed to an operating-handle is swung around a pivoting device also connected to said handle.

The object is to provide an opener in which the pivoting device and the knife may be so secured and constructed that the rim around the opening left by the part of the can removed shall be turned outwardly, openings of various sizes formed, and the device as a whole rendered simple and durable.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a view of the can-opener in side elevation. Fig. 2 is a top plan view. Fig. 3 is a bottom plan view, the pivoting device being detached from the handle; and Fig. 4 is a transverse section through the line $x x$ of Fig. 2.

A represents the handle, which in the present instance is formed integral with the part which carries the knife and pivoting device. That portion of the shank of the handle where the knife is secured is preferably spread out laterally, as shown at a, and provided with a transversely-elongated slot a', down through which the shank of the knife extends. Along a side of the slot a' there is formed an uprising lug a^2, which in practice may be conveniently cast integral with the handle and its shank, and on the under side of the portion a and on opposite sides of the slot a' there are located runners B and B′, the former on the side toward the handle and the latter on the side toward the pivoting device. The runner B′ is preferably formed on a curve, as clearly indicated in Fig. 3, in order to prevent binding as the metal is turned up during the cutting operation. The bottoms of the runners B and B′ form bearing-faces, against which the metal is pressed by the action of the knife during the cutting operation.

The shank of the knife is represented by C, and at its upper portion is preferably widened to provide for fastening devices c—screws or rivets—by means of which it is firmly fastened to the face of the uprising lug a^2. As the shank extends downwardly through the slot a', its shank is rapidly narrowed and developed into a blade c', which extends forwardly and gradually downward below the bottoms of the runners B and B′, and the metal to be cut is drawn between such edge and the bottoms of the runners as the blade is moved along by the handle, and is finally cut as it is forced between the runners by the blade. It will be observed that the edge of the blade is set in a direction transverse to the longitudinal axis of the handle and that its cut is upwardly from the under side of the metal. The end of the shank of the handle where the pivoting device is secured is provided with a recess D on its under side and extending from the extreme end toward the handle, and from the inner end of said recess an opening d extends upwardly through to the top of the shank.

The pivoting device may consist of ordinary wire of suitable diameter and is so shaped as to form a plurality of pivots—in the present instance two e and e'—and its shank E is adapted to seat within the recess D and extend upwardly through the opening d. It may be secured in position by upsetting the head of the shank. The pivoting device is provided at its end with a point e^2 for allowing it to be readily inserted through the thin metal of the can.

For general use I find it desirable to locate the pivots e and e' about one-quarter of an inch apart, so as to vary the diameter of the circle cut by the knife-blade half an inch. This I find to be sufficient to adapt the cutter to cans of the various sizes in common use; but the number of such pivots formed by the shaping of the pivoting device might be increased or their distance apart varied, as experience may dictate.

The forming of the recess D as a seat for the shank of the pivoting device enables me to utilize ordinary round wire for said device and at the same time hold it securely in position without danger of its turning while pressure is exerted thereon during the operation.

To operate the can-opener, the point e^2 is first inserted through the can at a point about

central of the portion which it is desired to remove, and if a larger opening is desired the the point is pushed in until the tin surrounds the pivot e'. The handle is then pressed down to insert the point c^2 of the cutting-blade through the can and is then swung around in a circle about the pivot e' as a center. If a smaller opening be desired, the pivoting device is inserted until the tin surrounds the pivot e.

While I have shown two runners or bearings B and B′ and find it preferable to so construct the device, one of them might be omitted and a cut still be made.

What I claim is—

1. The combination, with a handle and a cutting-blade carried thereby, of a pivoting device secured to the handle and provided with a plurality of pivots located at different distances from the blade, substantially as set forth.

2. The combination, with the handle and means for pivoting it to swing in a circle, of a pair of runners on the under side of the handle and a cutting-blade extending between the runners and spaced from them to permit the material being cut to bend up between the blade and runner, the cutting-blade extending beyond the bearing-faces of the runners and provided with a cutting-edge directed toward the under side of the handle, substantially as set forth.

ALBERT B. SCHOFIELD.

Witnesses.
FREDK. HAYNES,
I. B. DECKER.