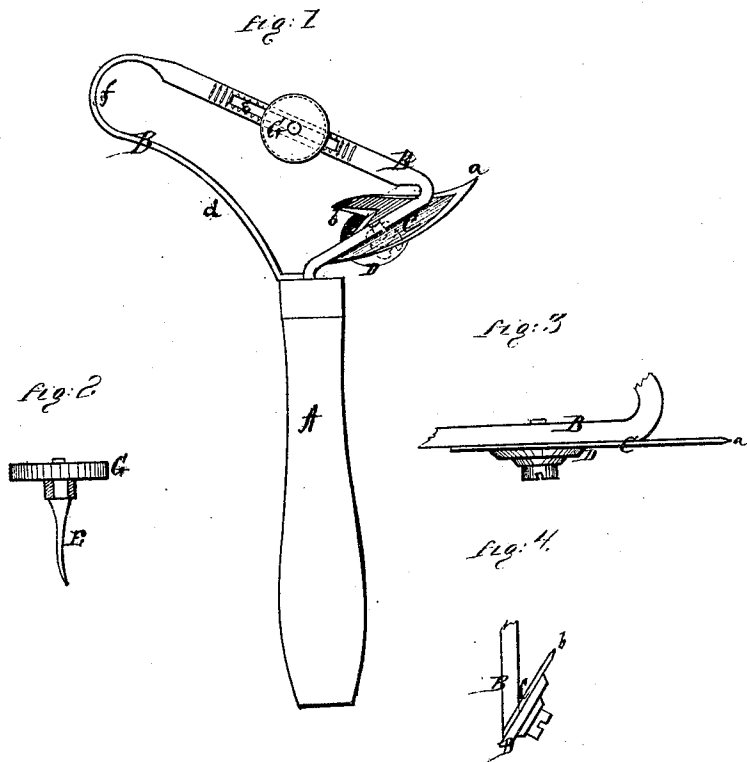


A.C. Platt,

Can Opener.

No. 106,723.

Patented Aug. 23, 1870.



Witnesses
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ALFRED C. PLATT, OF SANDUSKY, OHIO.

Letters Patent No. 106,723, dated August 23, 1870.

IMPROVEMENT IN CAN-OPENERS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, ALFRED C. PLATT, of Sandusky, in the county of Erie and in the State of Ohio, have invented certain new and useful Improvements in Can-Opener; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, making a part of this specification.

The extent to which goods of various kinds are now hermetically sealed in tin cans has created an urgent need for some convenient instrument for opening them. All devices heretofore constructed for this purpose are found to be either entirely impracticable or very inconvenient, so much so as to prohibit their introduction, and consumers are left to resort to the old methods of opening cans, sometimes by unsoldering them, piling hot coals upon the end, and blowing upon them until their faces are scorched and red; sometimes by chopping into them with a hatchet, to the danger of spattering their contents over surrounding objects; sometimes by plunging a huge knife into the can, and with difficulty working it about until an orifice is made large enough for the exit of the goods, and sometimes by other ways equally as awkward and inconvenient.

The herein-described instrument entirely obviates the disadvantage of other devices for this purpose, and renders the operation of opening cans simple and easy, so that a child can perform it; hence,

The nature of my invention consists in the construction and arrangement of the various parts constituting my can-opener, as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of my can-opener;

Figure 2 is a side view of the adjustable center-spur;

Figure 3 is a side view of the cutting mechanism; and

Figure 4 is an end view of the same.

A represents the handle, to the end of which the metal frame B is firmly secured. This frame is formed of a bar, one end of which is inserted in the handle A, and then bent toward the right, as shown in fig. 1.

To this portion of the frame or bar B the cutting-plate C and cutting-wheel D are attached.

The cutting-plate C is formed at its outer end with a spur or point, *a*, and on its under inner side with a hooked cutting-spur, *b*.

The bar B is then turned or bent toward the left for a suitable distance, and this portion is flattened and provided with a longitudinal slot, *e*, in which the point or center spur E is secured by the thumb-nut G.

The bar B is then turned in a semicircular shape toward the handle, curved inward, and then secured to the end of the handle, as shown.

To use the instrument, the spur or point *a* is placed upon the can near the outer edge, and crowded through, or, if the tin is thick, a gentle stroke with the palm of the hand upon the curved portion of the frame B, (at *d*), forces it through the tin. It is then brought down toward the rounding edge of the spur, which enlarges the slot, and leaves it in shape to admit the hooked cutting-spur *b*.

This spur is then hooked into the slot, and the point E is forced through the can, where it happens to fall, in the direction of the center by pressing upon the thumb-nut G, when, by pulling upon the handle and pressing with the thumb against the curved portion *d* of the bar B, the tin is easily cut out.

For different sized openings, the point E is made adjustable in its proximity to the cutting apparatus, by sliding in the slot *e* on the bar B, and is held in place by the set-screw or nut G. A ring upon the under side of the said nut fits into notches or corrugations on the upper side of the bar, which prevents slipping.

The cutting-plate C is set with the front end *a* a little outside of a line tangent with the cutting-point, horizontally, which leaves the back part of the cutting-spur free, and it does not crowd against the edge of the tin outside of the cut. The cutting-plate is also set from a vertical line inward, at an angle of about forty-five degrees. With this inclination, the tin, as it is cut, is readily separated, one part passing easily up over the hook or spur *b*, while the other is pressed down beneath it, and the strong force which would be required to press the tin away edgewise or laterally, if the shears were vertical, is saved.

Another advantage of this inclination is, the cutting-wheel D is continually crowded in close contact with the cutting-spur *b*; hence, if, by wear, it becomes loose, it will be by its position kept in close contact with the spur, and cut equally well.

The friction caused by the inclination also tends to keep the cutting-edges sharp. The cutting-spur and wheel, especially the wheel, are beveled about equal to their inclination. When not greater than this, the whole breadth of the edge of the cutting-wheel is crowded upon the surface of the tin, increasing the friction, and causing it to revolve, and thereby augments the ease of cutting.

The instrument can be used without the wheel, simply with a notch in a plate, or by two plates fastened with their face sides together, so as to form a cutting-notch, but much more force would be required.

The handle A is placed in front of the cutting apparatus, so that the line of draft will be in advance, and

not above the blade, as in other instruments, which prevents it from tipping forward and slipping out, or otherwise interfering with its cutting easily. This line of draft also prevents all tendency of the instrument to twist in the hand, and thereby renders the cutting easier.

The spur *a* is for the purpose of making an incision in the can, to receive the cutting-hook *b*. It is upon the end of the cutting-plate *C*, and is made hooking upon one edge, and rounding upon the other, in order that, when inserted, by prying down upon the rounding side the tin is raised up in front of the spur, and opened, convenient to receive the cutting-hook *b*.

The advantages of this hooking-cutter or spur are obvious. Instead of requiring great force to press on and cut through the tin, besides slipping out frequently and splashing the contents, as with blades of ordinary construction for this purpose, it draws the instrument into and retains it in cutting position, so that simply pulling upon the handle cuts out the tin with ease.

The central point *E* is set pointed or hooking back, or in an opposite direction from the cutting-spur *b*, in order that, as the cutting force is applied, it will draw into the can, and prevent slipping out. This inclination, in combination with the opposite one of the cutting-spur *b*, hugs the instrument to the can, and no care is required to keep it in position.

The thumb-nut *G* is made large, for the purpose of more easily and securely tightening the spur, and forming a surface to press upon with the thumb or hand, to force the spur through.

The semicircular portion *f* of the bar or frame *B* rests upon the can beyond the cut. This steadies the instrument, hugged down as it is by the cutting appa-

ratus, and prevents the disk of tin, when partially cut, from dipping into the can and splashing the contents. The curved portion *d* strengthens the instrument, and serves to rest the thumb against when cutting, and to strike upon when forcing the spur *a* through thick tin.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The cutting-plate *C*, set in an inclined position, and provided with the spur or point *a* and the hooked cutting-spur *b*, constructed and operating substantially as and for the purposes herein set forth.

2. In combination with the cutting-plate *C*, the cutting-wheel *D*, both constructed and arranged to operate substantially as and for the purposes herein set forth.

3. The bar or frame *B*, constructed as described, with slot *e*, semicircular part *f*, and curved part *d*, all constructed substantially as and for the purposes set forth.

4. A can-opener, having the handle placed in advance of the cutting apparatus, substantially as herein set forth.

5. The combination of the handle *A*, bar *B*, cutting-plate *C*, cutting-wheel *D*, and central spur or point *E*, all constructed and arranged as described, to operate substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 25th day of May, 1870.

ALFRED C. PLATT.

Witnesses:

E. M. COLVER,
NICHOLAS BUYER.