Sept. 15, 1925. 1,553,442

P. A. HABERL

CAN OPENER

Filed Oct. 25, 1923

Fig. 1

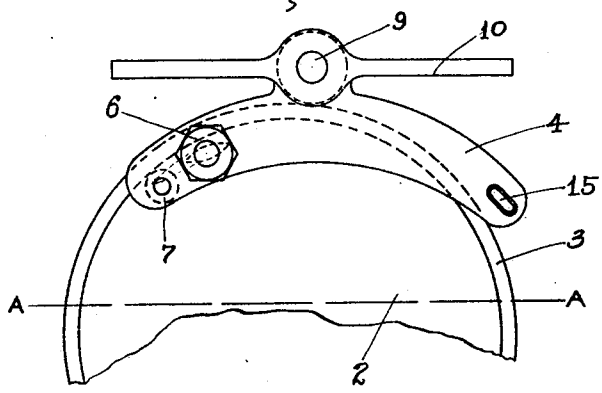


Fig. 2

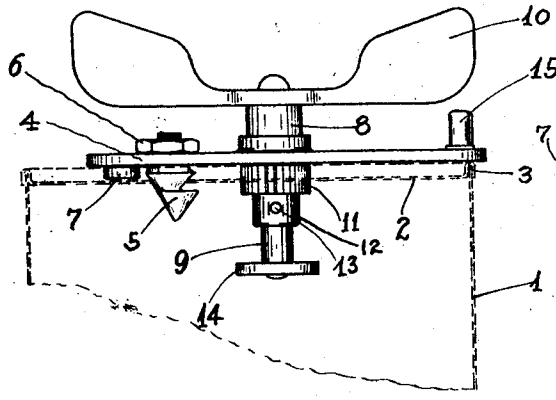
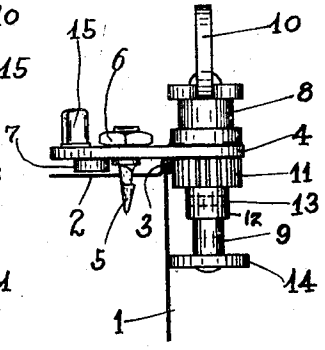


Fig. 3



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UNITED STATES PATENT OFFICE.

PAUL A. HABERL, OF DENVER, COLORADO.

CAN OPENER.

Application filed October 25, 1923. Serial No. 670,752.

To all whom it may concern:

Be it known that PAUL A. HABERL, citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, has invented certain new and useful Improvements in Can Openers; and he does hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in can openers and more particularly to a can opener which will be provided with a detachable cutting blade and a manually operated toothed wheel for moving the cutting blade about a can cover for cutting and removing the same from a can.

An object of the invention is to provide an improved can opener which will be provided with a main body portion, a detachable knife or blade secured to said body portion, bearing means for engaging the bead or rim at the top of a can and a manually operated means for moving the knife or blade about the can cover to remove the same from a can.

Another object of the invention is to provide an improved can opener to be highly efficient in use and quite inexpensive to manufacture.

Other objects will appear as the description proceeds.

In the accompanying drawings which form a part of my application,

Fig. 1 is a plan view of a fragment of the top of a can showing my improved can opener in position thereon,

Fig. 2 is a vertical section on the line A—A of Fig. 1, and

Fig. 3 is a side elevation of the can opener showing a section of a can.

Like characters of reference are used throughout the following specification and the accompanying drawings to designate corresponding parts.

In my drawings I have designated the side wall 1 of a can, the top 2 thereof and rim 3 about said top.

My opener comprises a substantially crescent shaped body portion or plate 4, and carries adjacent one of its ends a detachable hooked knife 5 which is held attached to said plate 4 in any suitable manner as by a nut 6. A bearing lug 7 is disposed on the lower surface of the plate 4 and is adapted to bear against the rim 3 of the can to better guide the knife and to hold the same slightly away from the rim to prevent the said knife from binding against the rim.

The plate 4 is provided adjacent the central portion with a projection 8 through which the shaft 9 is revolvably mounted, and operated by suitable hand or wing lever 10. A sharp toothed gear or wheel 11 is mounted upon said shaft 9, and is held thereon by means of a suitable collar 12 and is held in position by the pin 13 in such a manner as to permit the wheel 11 to rotate when the handle 10 is operated. A guide wheel 14 is also mounted on the shaft 9 and is disposed beneath the plane of the wheel 11 and is adapted to contact with the outer wall or surface 1 of the can. The toothed wheel 11 is adapted to engage and rotate about the bead or flange 3 of the can in such a manner as to pull the knife 5 in a circuitous manner to remove the cover from the can.

The operation of the can opener is as follows: The knife 5 is pressed through the top 2 of the can so that the upper portion of the knife engages and cuts the top 2. The lower portion of the knife is hooked or curved as best illustrated in Fig. 2 of the drawings and the whole knife may be removed when desired for sharpening. The lug 7 will engage and bear against the rim 3, thereby guiding the knife and keeping the same away from the rim and preventing its binding there-against. The rotating of the handle 10 also rotates the toothed wheel 11 which contacts the bead 3 of the can and has the same action as that of a Stillson wrench, and will cause the body portion 4 and knife 5 to travel about the can, thereby cutting the cover in a line parallel with and adjacent to the rim 3. The guide wheel 14 is adapted to bear against the side wall 1 of the can and serves to steady the device when in operation.

The turning or rotating of the hand lever 10 will usually be sufficient to cause the device to retain its operative position by reason of the relation or positioning of the knife 5, lug 7, wheel 11, and guide wheel 14 to the rim of the can. However, it may be found desirable to exert some inward pressure on the end of the plate 4 opposite the knife end, and for this purpose I have provided a thumb piece 15.

It will be understood that this device will open square cans as well as round cans and that the same can be sharpened, when de-

sired, thereby making the opener a highly efficient and satisfactory mechanical device.

Many minor changes in detail of construction may be resorted to without departure from the spirit of the invention.

Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States is:

1. A can opener comprising a plate, a knife depending therefrom, a turnable shaft extending through said plate, a toothed wheel affixed to said shaft, there being a clearance space between said knife and the rim of said wheel, and a guide member mounted on the shaft below said toothed wheel.

2. In a can opener, the combination with a body portion, of a cutting knife secured at one end thereof, a thumb piece at the opposite end of said body portion connected directly therewith and extending upwardly therefrom, and means carried by said body portion intermediate said knife and thumb piece for moving said body portion about a can cover to open or cut the same from a can.

3. In a can opener, the combination with a body portion, of a cutter rigidly carried thereby, a bearing lug positioned directly on the body portion to the rear of said cutter, and a thumb rest positioned directly on the body portion in advance of the cutter.

4. In a can opener, the combination with a body plate, a bearing lug depending therefrom adapted to engage the rim of a can, a shaft spaced from said bearing lug and being carried by said plate, a wheel on said shaft adapted to engage with the outer surface of a can, and a knife carried by said plate intermediate said bearing lug and said wheel, said shaft when rotated adapted to move the can opener about a can.

In testimony whereof I affix my signature.

PAUL A. HABERL.