

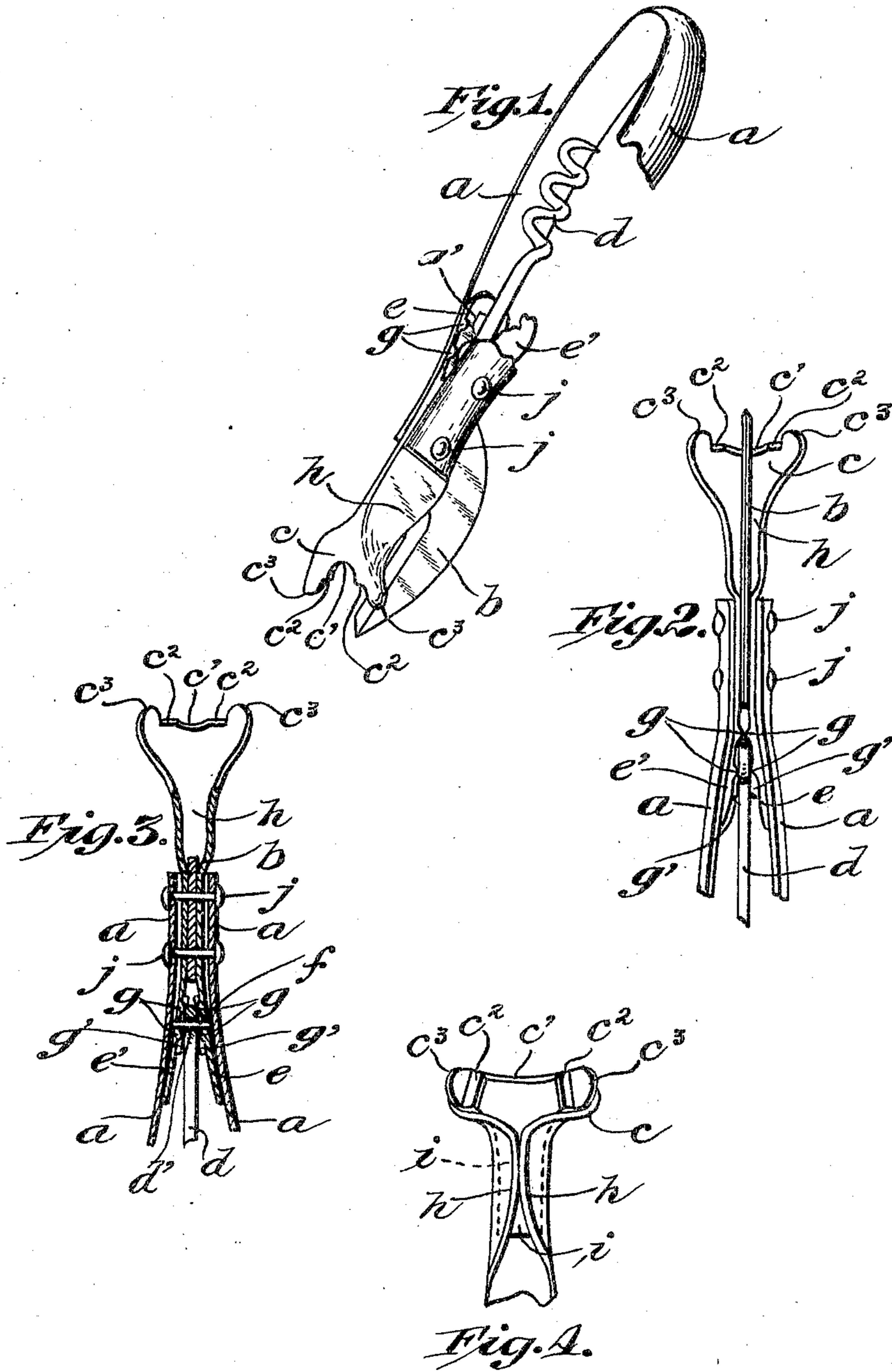
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G. C. PARISH.
CAN OPENER.

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NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

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CAN-OPENER.

SPECIFICATION forming part of Letters Patent No. 776,540, dated December 6, 1904.

Application filed March 24, 1904. Serial No. 199,682. (No model.)

To all whom it may concern:

Be it known that I, GRAHAM C. PARISH, a citizen of the United States, residing at Kingston, in the county of Ulster and State New York, have invented certain new and useful Improvements in Can-Openers, of which the following is a specification, reference being had therein to the accompanying drawings, which form a part thereof.

My invention relates to can-openers, and more particularly to a type thereof wherein the utensil is so constructed as to admit of the correlation therewith of an auxiliary tool, as a corkscrew.

The object of the invention is to provide a can-opener which will be so constructed as to permit of a corkscrew or other auxiliary tool being mounted within the handle in a manner to firmly hold such tool either in the open or the closed position and which will relieve the pivot-pin thereof from liability of becoming so loosened relative to or detached from its support as would tend toward the disintegration of the completed structure.

A further object is to provide a can-opener of the above description wherein the fulcrum-head may be made of sheet metal and integrally with the means carrying the auxiliary tool and may be so constructed and arranged as to be capable of being secured to the handle simultaneously with the cutting-blade, serving to reinforce the handle at that point.

A still further object is to provide a can-opener of this type wherein a loose pivot-pin for the auxiliary tool may be used, and thus avoid one riveting process.

A still further object is to provide a can-opener the fulcrum-head of which will be equipped with a plurality of bearing-faces to adapt the device to use upon different designs of cans.

A still further object is to provide a can-opener wherein the handle may be formed of comparatively light sheet metal without liability of becoming distorted through blows or pressure exerted thereon to force the cutting-blade through the tin of a can, and a still

further object is to provide a can-opener which will be light of weight, durable, inexpensive to manufacture, and not liable to become disarranged through use.

The invention consists, primarily, in the combination, in a can-opener, of a handle, a cutting-blade, a fulcrum-head, oppositely-disposed spring-arms secured within said handle rearwardly of said blade and fulcrum-head, and means in conjunction with said spring-arms whereby an auxiliary tool may be pivotally mounted therebetween, and in such other novel features of construction and arrangements of parts as are hereinafter set forth and described, and more particularly pointed out in the claims hereto appended.

Referring to the drawings, Figure 1 is a perspective view of the preferred form of the invention with one side of the handle broken away to disclose the auxiliary tool and its means of attachment. Fig. 2 is an enlarged bottom view of the lower portion of the device. Fig. 3 is a horizontal section of the view shown in Fig. 2, and Fig. 4 is a view of a slightly-modified form of the invention.

Like letters refer to like parts throughout the several views.

The preferred form of the invention comprises a handle *a*, formed of a sheet-metal strip arched laterally, as shown, and so bent centrally thereof as to form a looped grip open at the top and at the bottom. Attached to this handle in the manner hereinafter referred to are the cutting-blade *b*, of tempered steel, the fulcrum-head *c*, and the auxiliary tool, as the corkscrew *d*.

Secured within the handle *a*, directly back of the cutting-blade *b*, are two oppositely-disposed spring-arms *e e'*, the end of each of which is turned outwardly to engage the side of the handle, being free to move longitudinally of the handle *a*, and the other end of which is utilized to attach the said arm to the handle. In the preferred form of the invention, however, it will be observed that these arms are made integral with the fulcrum-head *c*, which construction is desirable in that both the said head *c* and the said arms may be at-

tached to said handle by the same means and at a single operation. Mounted between the arms $e e'$ is the corkscrew d , which is secured in relation thereto by means of a loose pivot-pin f , passing through the eye d' of said corkscrew and both said arms. By making the pin of approximately the length of the distance between the opposite sides of the handle a , so as to bring the ends thereof into close juxtaposition thereto, it may be used without being secured to either of said arms $e e'$, as the said handle will prevent its escape. This construction results, in addition to the economy of production, in such a distribution of wear about said pivot-pin f as to provide a fairly permanent bearing for the said corkscrew. The tension on the spring-arms $e e'$ is ordinarily sufficiently great to maintain the corkscrew in the closed position; but when in use it is desirable to have a positive locking means therefor, one that will prevent said spring-arms being readily spread to permit the movement of the corkscrew in either direction. This I accomplish by providing parallel abutments $g g$, extending at substantially right angles to the handle, which abutments are formed up from the metal of the arms $e e'$ in a manner to present abrupt inclines on each side of a channel adapted to fit the shank of said corkscrew. I also generally provide similar abutments $g' g'$, parallel with said handle and centrally of the said arms to guard against the accidental swinging of the corkscrew in either direction when the can-opener is in use and causing injury to the palm of the hand or fingers of the user through a possible weakness of the said spring-arms.

The fulcrum-head c is preferably formed up of sheet metal and comprises a plurality of bearing-faces which respectively consist of the curved recess c' , centrally of the front of said head, the rectangular recesses $c^2 c^2$, one at each side of and below said recess c' , and the points $c^3 c^3$ below said recesses $c^2 c^2$, and a rearwardly-extended channeled shank h , which, as stated, is divided rearwardly of the cutting-blade to form the spring-arms $e e'$. In forming up the head c the shank h is made narrow and the forward part of the head is flared laterally and upwardly and then outwardly and downwardly, resulting in two horns of arched metal forming the bearings above described, and a suitable space between the head c and the blade b below it.

In the modification shown in Fig. 4 the construction is substantially as heretofore described, except that the bearings $c' c^2 c^2 c^3 c^3$ instead of being blanked out of the sheet metal of which the head c is formed are formed on a cast-metal fulcrum secured to said head c by being fitted between the horns thereof and having the shank h clamped thereabout and about a stem i on said casting.

In assembling the device of the preferred form of the invention the cutting-blade b is

placed in the channel of the shank h of the head c , the corkscrew d is placed between the arms $e e'$, and the pin f is passed through the holes drilled in said arms and the eye d' of said corkscrew, and these parts are then placed between the ends of the handle a and secured in place by rivets, as $j j$. This operation not only unites all the parts constituting the device, but tensions the arms $e e'$ through the contraction of the sides of the handle a upon the outwardly-turned ends of said arms.

The manner of assembling the modification shown in Fig. 4 is substantially identical with that above described, inasmuch as the cast fulcrum of the head a must be secured by a separate operation to the channeled sheet-metal head proper, c , before the completed device can be assembled.

In use the bearing c' permits the blade to be used close to the top edge of a can, the bearings $c^2 c^2$ provide a side bearing to permit the top of a can to be removed by cutting around the side of the can adjacent thereto, and the points $c^3 c^3$ permit the cutting of any flat surface. The handle a being made of arched sheet metal presents a more comfortable gripping-surface in addition to materially increasing the strength of the handle relative to the weight of the metal used. The corkscrew or other auxiliary tool d is held firmly in place by the spring-arms $e e'$, which, however, give readily when it is desired to either open or close the tool. The abutments $g g$ and $g' g'$ serve merely as limitations to the extent of pivotal movement of the said tool d , and while offering sufficient resistance to prevent movement of said tool under ordinary circumstances the conformation thereof is such as to cause a separation of the arms $e e'$ under direct pressure and permit a free movement of the tool.

It is not my intention to limit the invention to the precise details of construction and combination of parts as herein shown and described, it being apparent that such may be varied without departing from the spirit and scope of the invention; nor is it my intention to claim, broadly, the combination of a can-opener and a corkscrew, as my invention relates more particularly to the arrangement of the elements each to the other entering into the combination and the structure of the various parts by which such a combination is possible.

Having described the invention, what I claim as new, and desire to have protected by Letters Patent, is—

1. In a can-opener, the combination of a handle, a fulcrum-head, a cutting-blade, oppositely-disposed spring-arms secured within said handle rearwardly of said blade and means in conjunction with said spring-arms whereby an auxiliary tool may be pivotally mounted therebetween.

2. In a can-opener, the combination of a

looped handle, a sheet-metal fulcrum-head carrying oppositely-disposed spring-arms, a cutting-blade, said fulcrum-head and blade being secured between the ends of said handle whereby said arms are projected rearwardly thereof and within said handle, and means in conjunction with said spring-arms whereby an auxiliary tool may be pivotally mounted therebetween.

3. In a can-opener, the combination of a looped handle, a sheet-metal fulcrum-head carrying oppositely-disposed spring-arms turned outwardly to engage the sides of said handle whereby said arms are tensioned, a cutting-blade, said fulcrum-head and said cutting-blade being secured between the ends of said handle whereby said arms are projected rearwardly thereof and within said looped handle, and means in conjunction with said spring-arms whereby an auxiliary tool may be pivotally mounted therebetween.

4. In a can-opener, the combination of a handle, a fulcrum-head, a cutting-blade, oppositely-disposed spring-arms secured within said handle rearwardly of said blade and a loose pivot-pin passing through both said arms and extending into close juxtaposition to said handle whereby an auxiliary tool may be pivotally mounted therebetween.

5. In a can-opener, the combination of a handle, a fulcrum-head, a cutting-blade, oppositely-disposed spring-arms secured within said handle rearwardly of said blade and having abutments thereon extending at substantially right angles to said handle, whereby accidental pivotal movement of an auxiliary tool is prevented, and means in conjunction with said spring-arms whereby an auxiliary tool may be pivotally mounted therebetween and adjacent to said abutments.

6. In a can-opener, the combination of a handle, a fulcrum-head, a cutting-blade, oppositely-disposed spring-arms secured within said handle rearwardly of said blade and having separate abutments thereon extending at substantially right angles to, and parallel with said handle respectively whereby accidental movement of an auxiliary tool is prevented, and means in conjunction with said spring-

arms whereby an auxiliary tool may be pivotally mounted therebetween and adjacent to said abutments.

7. In a can-opener, the combination of a sheet-metal looped handle, a sheet-metal fulcrum-head, a channeled shank and rearwardly-projected spring-arms integral therewith, a cutting-blade adapted to be seated in said channeled shank, said shank and said blade being secured between the ends of said handle, and means in conjunction with said spring-arms whereby an auxiliary tool may be pivotally mounted between said spring-arms.

8. In a can-opener, the combination of a sheet-metal looped handle, a sheet-metal fulcrum-head, a channeled shank and rearwardly-projected spring-arms integral therewith, a cutting-blade adapted to be seated in said channeled shank, said shank and said blade being secured between the ends of said handle, and a loose pivot-pin passing through both said spring-arms and extending into close juxtaposition to said handle whereby an auxiliary tool may be pivotally mounted between said spring-arms.

9. In a can-opener, the combination of a sheet-metal looped handle, a sheet-metal fulcrum-head, a channeled shank and oppositely-disposed, rearwardly-projected spring-arms having separate abutments thereon extending at substantially right angles to, and parallel with said handle respectively whereby accidental movement of an auxiliary tool is prevented, integral therewith, a cutting-blade adapted to be seated in said channeled shank, said shank and said blade being secured between the ends of said handle, and a loose pivot-pin passing through both said spring-arms and extending into close juxtaposition to said handle whereby an auxiliary tool may be pivotally mounted between said spring-arms.

In witness whereof I have hereunto affixed my signature, this 11th day of February, 1904, in the presence of two witnesses.

GRAHAM C. PARISH.

Witnesses:

VIRGIL B. VAN WAGONER,
HELEN A. JONES.