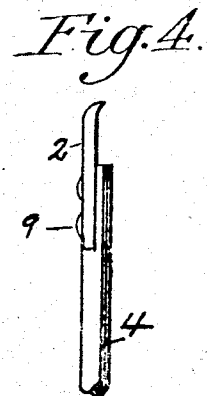
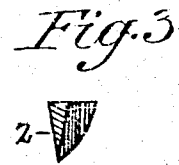
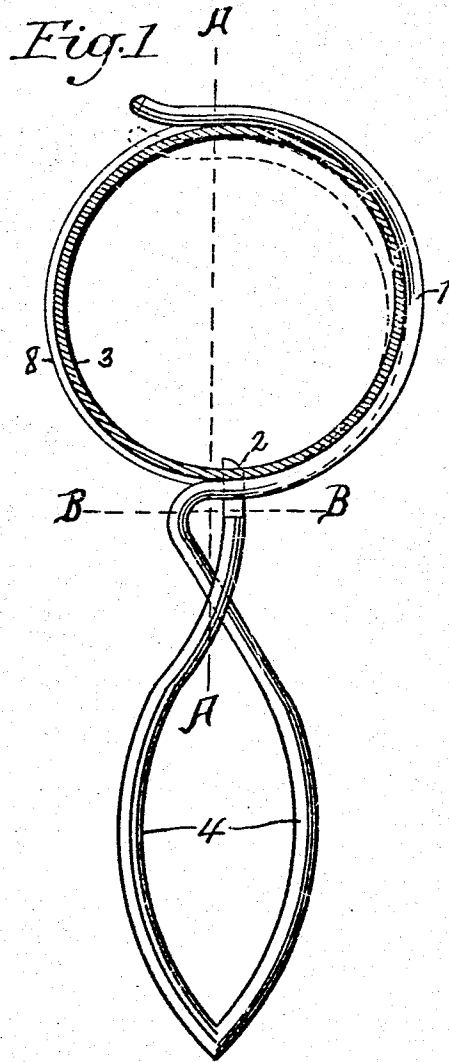


A. C. LEMM.
CAN OPENER.
APPLICATION FILED MAY 27, 1909.

940,396.

Patented Nov. 16, 1909.



WITNESSES:

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CAN-OPENER.

940,396.

Specification of Letters Patent.

Patented Nov. 16, 1909.

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To all whom it may concern:

Be it known that I, ADOLPH C. LEMM, citizen of the United States, residing at Fremont, in the county of Sandusky and State of Ohio, have invented certain new and useful Improvements in Can-Openers, of which the following is a specification.

The general purpose and object of my invention is to provide a suitable can opener which is adapted to the opening of certain self-sealing fruit jars; and particularly such as have their covers screw threaded thereto; and of which the familiar Mason jar is an illustration.

Referring to the drawings: Figure 1 represents a plan view of my device, together with a section of a can cover shown in place. Fig. 2 represents a section of Fig. 1 on the line A A: the balance of the cover, which is removed in Fig. 1, being shown. Fig. 3 represents a cross section of the knife portion of my device on the line B B of Fig. 1: the drawing being enlarged. Fig. 4 represents a modification.

Coming now to a more detailed description of my device, and referring to the drawings furnished herewith: preferably my device consists of a suitable piece of wire rod which is provided with a spring operating finger 1 at one end, and a knife portion 2 at the other: and which is suitably formed, as and for the purpose hereinafter explained. In Fig. 1, the normal position of said finger is shown in dotted outlines, while in full lines it is shown as embracing a sectioned portion of a can cover 3. Said rod being formed with a spring finger at one end, as stated, oppositely, said rod is suitably bent and formed for the double purpose, both of forming a handle 4, and to bring the knife portion 2 into operative position.

As is well known, it is usual for can covers of the sort described to be made of light material; and in consequence the exterior of the cover is formed with a screw thread 5 counter-part of the screw thread 6 within; and it is intended that when said finger is in operative position it shall be made to follow said counterpart. In the construction of my device it is to be understood that the end of said rod having the knife portion shall be so returned in forming said handle that it is made to pass over the handle portion, and under the finger; and that the material of said rod is such, and that said end is so

formed, that the knife portion 2 is spring held against said finger. It being now understood that in the operation of my device said finger is made to follow said counterpart, it is manifest that as said finger follows said counterpart, its inner or fixed end, following the lead of the thread, becomes lifted or is carried away from the lower or outer edge of the cover rim. As shown in the drawings, Fig. 1, the point of said knife is made to project slightly beyond the inner side of the cover rim, and is made to engage its lower edge when in operative position, and to travel to place thereunder as said device is operated, said point being inserted between the usual rubber or other gasket, and said edge; and thus as the fixed end of said finger is made to rise by following said counterpart, said rod being of suitable material, a certain amount of friction is produced, sufficient so that presently, and usually with a fraction of a turn, the jar being held, the cover is made to start.

In the operation of my device it is found most practical to insert the point of the knife at a point nearly opposite the beginning of the thread: the finger will then readily engage said counterpart, when sprung into place. It may be noticed in the drawings that said finger is made to embrace more than half of the circumference of said cover; but this is from convenience only and not from necessity, as will presently appear. It is now understood that as said device is made to operate an increasing amount of friction is produced upon said cover, and in consequence there is a strong tendency on the part of said finger to slip said thread, causing the knife to be forced from under said edge, thus preventing the operation of said device; and ordinarily this result would be produced, without the use of a very strong and unnecessarily heavy gripping finger, made to embrace more than half of the circumference of said cover. To avoid the use of such a finger, so far as its excessive weight and strength are concerned, I make the end of said knife suitably curved as at 7. It is commonly known that said covers are made with a flaring edge 8, so as better to permit of their being screwed on, and said curvature is made to substantially conform thereto. The purpose of said curvature it may now be said is primarily two fold, viz: first, it prevents the lateral withdrawal of the knife, or in other words,

its being forced out from under the edge of the cover rim, by the tendency of said finger to slip said thread; and second, it prevents cutting of the gasket when removing the cover. Incidentally said curvature serves to restore the rim to its original form, where by accident or otherwise it may have been bent out of shape; and this is accomplished in a measure, coincidently with the removal of said cover; but more fully and completely by a suitable holding of said cover, while my device is applied in the usual manner required for the removal of said cover and made to rotate about said rim. It has been stated that as the fixed end of said finger is made to rise, a certain amount of friction is produced, sufficient so that usually with a fraction of a turn, the cover is made to start; but notwithstanding this, in practice it is found that the admission of air to the sealed jar renders the opening thereof, or the removal of its cover, less difficult; and the insertion and rotation of the knife separating the gasket from the cover, work to that end. While other material may ultimately be found equally desirable, at present I prefer, and recommend, the use of a suitably tempered wire of spring steel, from which to construct my device.

While I have shown and described my device in its preferred form as constructed of a single piece of wire, the knife and finger portion both being integral therewith, nevertheless, it may be understood that said knife may be made separately and secured to the end of said rod by suitable means, as shown in Fig. 4, without departing from the spirit of my invention; but manifestly with more labor and less convenience, hence I broadly claim means.

Having now fully described my invention what I claim as new is:

1. A device of the character described made with all its several parts integral, and comprising; a spring influenced finger, adapted to embrace a cylindrical cap or cover, and made to follow the lead of a

screw thread thereon; a knife portion, normally spring held against said finger, but when said device is operated, made to travel under the edge of said cover while the plane of travel of said finger increases in distance therefrom; and a handle portion for the operation of said device; substantially as described.

2. A device of the character described, comprising; a spring influenced finger; adapted to embrace a cylindrical cap or cover, and to follow the lead of a screw thread thereon; a knife portion, normally spring held against said finger, and means for causing the same to travel under the edge of said cover while the plane of travel of said finger increases in distance therefrom; together with spring operating means for holding said knife against said finger, and a handle portion for the operation of said device; all in combination and substantially as described.

3. A can opening device of the character described which is provided with a spring influenced gripping finger, adapted to embrace a cylindrical cap or cover, and to follow the lead of a screw thread thereon; a handle portion for the operation of said device and a knife carried thereby, for insertion between the lower edge of said cover and the usual gasket; said knife being normally spring held against said finger, but adapted to travel under said edge with the operation of said device; and means integral therewith for causing the same to travel under said edge while said device is being operated and the plane of travel of said finger increases in distance therefrom; all in combination together with spring operating means for holding said knife against said finger, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ADOLPH C. LEMM.

Witnesses:

FRANK J. TUTTLE,
WM. A. KOWALK.