No. 642,850. Patented Feb. 6, 1900.

F. N. RUSSELL.

CAN OPENER.

(Application filed May 18, 1899.)

(No Model.)

FIG. 1.

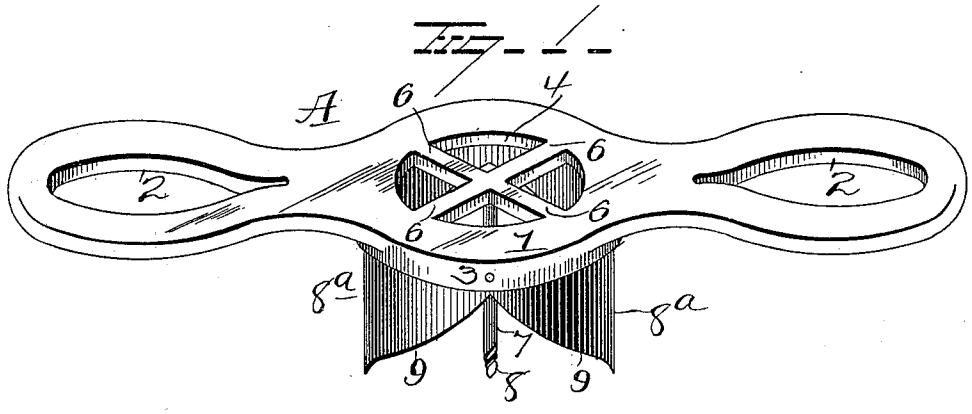


FIG. 2.

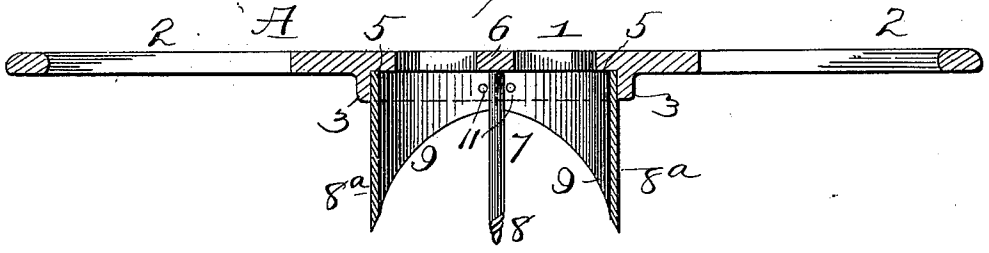
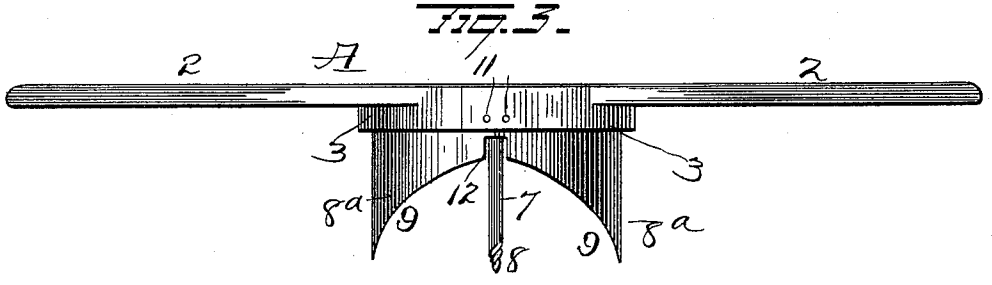


FIG. 3.



WITNESSES

E. J. Nottingham

G. F. Downing.

INVENTOR

F. N. Russell

By A. A. Seymour

Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FRANK N. RUSSELL, OF ELMIRA, NEW YORK.

CAN-OPENER.

SPECIFICATION forming part of Letters Patent No. 642,850, dated February 6, 1900.

Application filed May 18, 1899. Serial No. 717,358. (No model.)

To all whom it may concern:

Be it known that I, FRANK N. RUSSELL, of Elmira, in the county of Chemung and State of New York, have invented certain new and useful Improvements in Can-Openers; and I do 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.

My invention relates to an improvement in can-openers, the object of the invention being to provide a simple, neat, and inexpensive device which shall consist of few parts, capable of being operated with the expenditure of a small amount of power, and which shall be efficient in all respects in the performance of the functions for which it is intended.

With this object in view the invention consists in the novel construction and combination of parts, all as hereinafter described, and pointed out in the appended claims.

In the accompanying drawings, Figure 1 represents a view of my invention. Fig. 2 is a view in section of the same, and Fig. 3 is a view in side elevation.

A represents my improved can-opener, and it comprises a central section 1, preferably circular in form, and a pair of handles 2 2, projecting outwardly from said central section and in opposite directions. The central section 1 is provided with a depending annular flange or collar 3 and with a central opening 4, which latter is preferably circular in form and of a diameter slightly less than that of the annular flange or collar, whereby an annular seat 5 is formed on the bottom face of said central section 1 at its juncture with the annular flange or collar 3. Extending across opening 4 is a pair of supporting-arms 6 6, arranged in the form of a cross, their upper surfaces being in the same horizontal plane with the top face of central section 1, said arms being preferably integral with said central section. Depending from the point of intersection of arms 6 6 is a rod or pin 7. This rod or pin 7 is provided with a roughened, screw-threaded, or serrated lower section 8, adapted to enter the head of the can to be operated upon slightly in advance of the cutter 8^a, now to be referred to, the extreme end of said rod or pin preferably being pointed.

The cutter 8^a is preferably made of steel, and it comprises two cutting edges 9 9, the pointed section of one cutting edge being located opposite the pointed section of the other, while the inclined cutting-sections of one cutting edge are adapted to approach the corresponding cutting edges of the other for the purpose of forming a continuous cutting edge, the juncture between the two cutting edges being formed at a point slightly below the bottom edge of annular flange or collar 3. This cutter is secured to the inner face of the annular flange or collar 3 by rivets 11, the upper end of said cutter resting firmly against the seat 5, whereby any tendency on the part of said cutter to move upwardly when in use is absolutely prevented and the rivets relieved of strain.

In cases where it is not desirable to entirely remove the section operated upon by the cutting edges 9 9 I have provided a recess or notched portion 12, as shown in Fig. 3, formed at the juncture of two of the adjacent cutting edges, whereby a narrow strip or neck will be left uncut, thus rendering it possible to use the cut section for closing the can in cases where only a portion of the contents is removed when the can or vessel is first opened.

To open a can or other vessel, the can-opener is grasped in both hands and brought to a position so that the pointed end of rod or pin 7 rests upon the center of the section of the can or vessel to be opened, and by pressing downwardly on handles 2 2 the section of the can or vessel confined between the cutting edges 9 9 will be entirely or partially cut therefrom, as the case may be. During the process of cutting the pointed end of rod or pin 7 passes through the section to be cut slightly in advance of the pointed sections of cutting edges 9 9.

Should the cut section of the can or vessel be entirely severed, it is removed from the can or vessel by simply moving the can-opener in an upward direction, said cut section being lifted out by rod or pin 7, the roughened section 8 thereof acting as a stop against the accidental escape of said cut section during

the removal of the can-opener. In the event the cut section is only partially severed its removal from within the can or vessel is also effected as above, and as soon as it has reached a point beyond the opening formed in said can or vessel it may be easily disconnected from rod or pin 7 by imparting to the can-opener a quick pull in a direction at right angles to the position of said cut section or by turning the can-opener, and thus, in effect, unscrewing it from the cut portion of the can.

From the foregoing it will be apparent that but little exertion on the part of an operator is required to open a can or other vessel and, further, that it will not be necessary to hold the can or vessel while being operated upon, thus avoiding all danger of cutting or otherwise injuring the hands or fingers of the operator.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a can-opener comprising a central section having a skeleton or open-work center, a depending flange in a plane outside of said open center and laterally-projecting integral handles, a cutter secured to the inner face of said depending flange and provided with a notched portion and a centrally-located pin depending from the skeleton-work in the open center, the said pin projecting slightly below the lower edge of the cutter, substantially as shown.

2. As a new article of manufacture, a can-opener comprising a central open section having integral laterally-projecting handles and a depending circular flange, and cutter secured to said flange around the open central portion, substantially as shown.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

FRANK N. RUSSELL.

Witnesses:
O. D. GOODRICH,
ARTHUR W. BANFIELD.