L. BAPTISTE.

METAL CUTTING TOOL.

APPLICATION FILED APR. 18, 1912.

1,102,124.

Patented June 30, 1914.

2 SHEETS—SHEET 1.

Fig. 1.

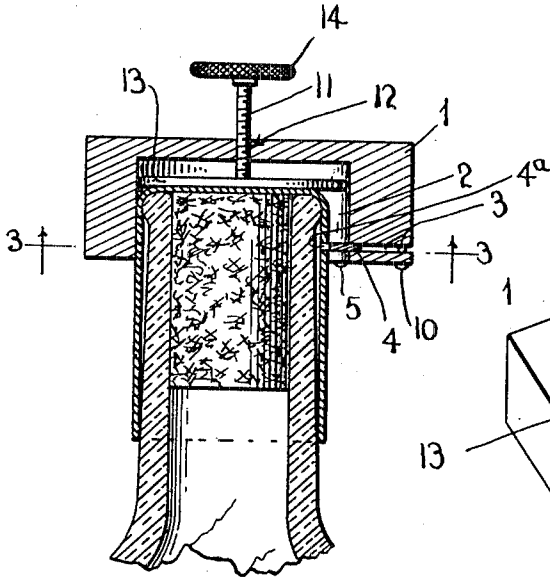


Fig. 2.

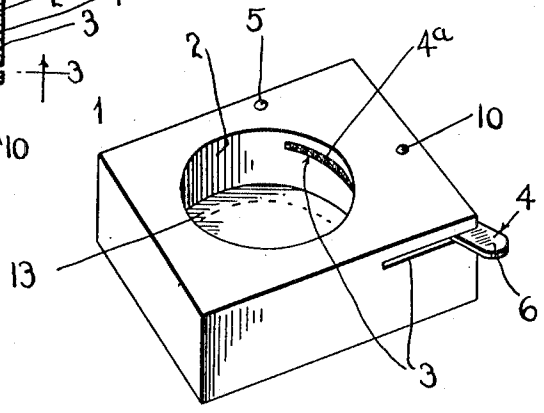


Fig. 3.

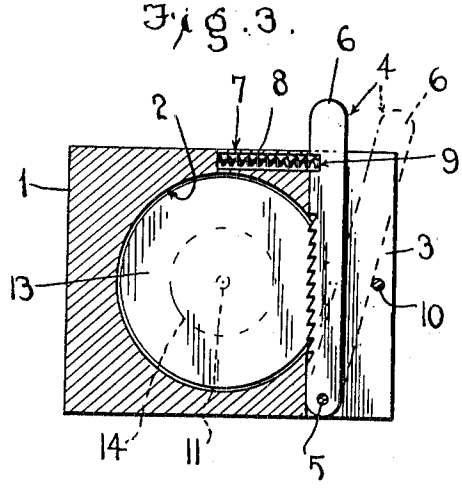
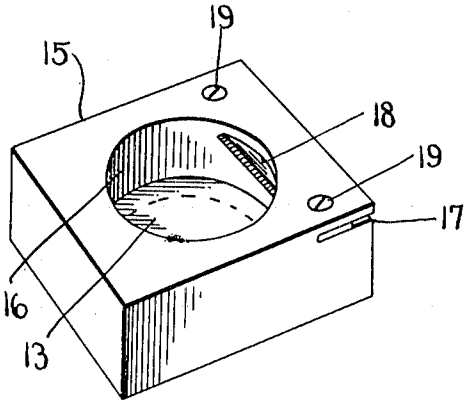


Fig. 4.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 5

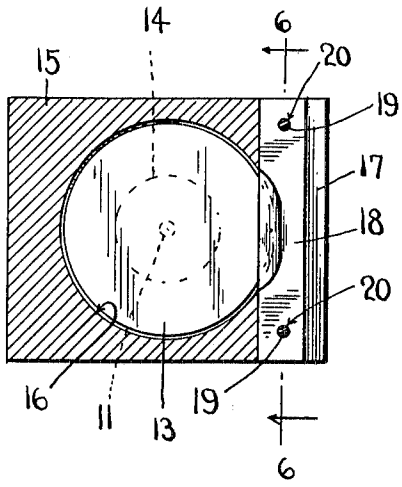


Fig. 7.

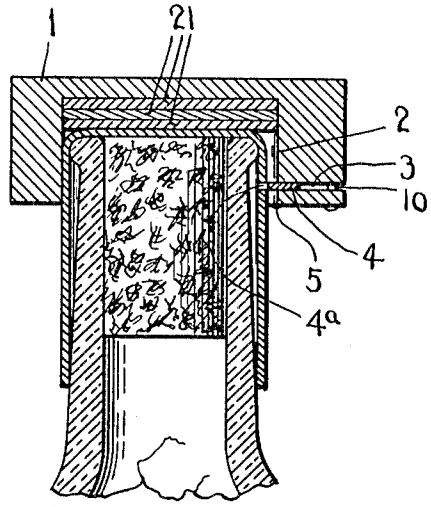


Fig. 6.

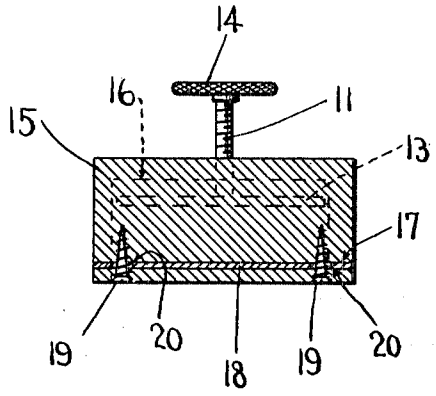
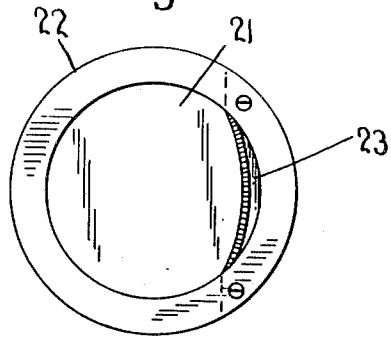


Fig. 8.



Witnesses

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METAL-CUTTING TOOL.

1,102,124. Specification of Letters Patent. Patented June 30, 1914.

Application filed April 18, 1912. Serial No. 691,578.

To all whom it may concern:

Be it known that I, LOUIS BAPTISTE, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Metal-Cutting Tools; and I do 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 metal cutting tools.

One object of the invention is to provide a tool designed particularly for the purpose of severing the tin foil or metal cap on the necks of bottles prior to removing the stopper, but said tool may be used for cutting other similar objects.

Another object is to provide a bottle cap cutter having an adjustable cutting mechanism whereby the device may be employed for cutting the caps of bottle necks, or other objects of different sizes.

A further object is to provide a device of this character having means whereby the depth at which the cut is made may be regulated.

With these and other objects in view, the invention consists of certain novel features of construction, and combination and arrangement of parts as will be more fully described and claimed.

In the accompanying drawings:—Figure 1 is a central vertical sectional view of my improved tool showing the same applied to a bottle for cutting the cap thereon; Fig. 2 is an inverted perspective view thereof; Fig. 3 is a horizontal sectional view taken on the line 3—3 of Fig. 1; Fig. 4 is an inverted perspective view of a modified form of the device; Fig. 5 is a horizontal sectional view thereof; Fig. 6 is a vertical cross section taken on the line 6—6 of Fig. 5; Fig. 7 is a central vertical cross sectional view of the form of the device shown in Fig. 1 illustrating a different means for regulating the cut made by the blade; Fig. 8 is a bottom plan view showing a slightly modified form of cutting blade and a different shaped body.

In the embodiment of the invention as shown in the accompanying drawing, 1 denotes the body of the device, which may be constructed of any suitable material and in any suitable shape, the same being shown in the first seven figures of the drawing as of rectangular form while in Fig. 8 the body is shown as being circular. In the lower side of the body 1 is a circular cap engaging recess or socket 2 which is adapted to receive the head and cap of the bottle as indicated in Fig. 1 of the drawings.

In one end or side of the body 1 near the bottom thereof is one or more slots 3, one of which is here shown. The edge of the slot cuts through or intersects the socket or recess 2. Engaged with the slot 3 is a cutting blade or knife 4 the edge of which is provided with saw teeth 4^a and projects a suitable distance into and across one side of the socket 2, as shown. The blade or knife 4 is pivotally connected at one end and adjacent to one edge of the body 1 as shown at 5. The opposite end of the blade 4 projects beyond the opposite edge of the body and forms a handle 6 whereby the blade may be swung inwardly to bring its cutting or saw tooth edge into the socket 2, to a greater or less extent thereby permitting the device to be used on bottle necks of different sizes and to position said device eccentrically upon the object to be operated upon.

In one side of the body 1 parallel with the edge of the same through which the handle end of the blade projects is a bore 7 in which is arranged a coiled blade retracting spring 8 one end of which is engaged with the inner end of the bore 7 and the other end is engaged with a notch 9 in the handle end of the blade as clearly shown in Fig. 3 of the drawings. By thus arranging the spring 8 it will be seen that the blade will be retracted after each operation. When retracted by the spring the outward movement of the blade is limited by a stop pin 10 arranged in the body and across the slot as shown.

In order to regulate or gage the depth at which the cut is to be made in the cap I preferably provide a gage or stop screw 11, which has an operative engagement with a threaded passage 12 in the top of the body. On the inner end of the screw is arranged a stop plate 13 which engages the top of the bottle cap when the device is placed thereon. On the outer end of the screw is an operating head 14 whereby the screw is adjusted to bring the stop plate to the desired position.

In Figs. 4, 5 and 6 of the drawings is shown a slightly modified form of the device. In this instance the cutter comprises

a body 15 constructed in the same manner, and having the same form of depth gage 16, as the cutter shown in Figs. 1, 2 and 3 of the drawings. In the modified form referred to, the body 15 is provided with a blade receiving slot 17 which intersects the socket in the body, and in said slot is arranged a blade 18 having a straight, plain cutting edge. The blade 18 in this form of the device is rigidly secured in operative position in the slot by screws 19 one of which is arranged in the body and engaged with screw holes 20 in each end of the blade as clearly shown in Figs. 5 and 6 of the drawings.

In Fig. 7 of the drawings is shown a different means for regulating the depth of the cut formed by the blade. In this instance, spacing disks or wads 21 are provided, one or more of which are placed in the inner end of the socket or recess to receive the end of the bottle cap when the device is engaged therewith. By placing a greater or less number of disks or wads in the socket it will be readily seen that the location of the cut made by the blade will be regulated.

In Fig. 8 of the drawing is shown another modified form of the device. In this instance the body 22 of the device is shown as being of circular form and as provided with a fixed blade 23 arranged as shown and as having its central portion curved or of segmental form to fit the curvature of the bottle cap with which it is engaged. While I have herein shown the curved blade 23 as applied to a circular form of body it will be obvious that this form of blade may be applied to any other shape of body and that the blades shown in the other figures of the drawings may be applied to bodies of circular or any other form.

In the operation of the device, the socket therein is engaged with the cap on the neck of the bottle and the edge of the blade brought into engagement with the side of the cap. When thus engaged the body is rotated thereby carrying the edge of the cutter around the cap and severing the same, as clearly shown in Fig. 1 of the drawings.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as claimed.

Having thus described my invention, what I claim is:—

A metal cutting tool comprising a rectangular-shaped body portion having a receiving socket larger than the object to be operated upon, said body portion having a slit formed therein and intersecting the socket, a cutter one end of which is movably located within the slit and secured to said body and having its opposite end projecting beyond the latter, whereby the cutting edge of said cutter may be manually brought in contact with the object to be operated upon, a spring for yieldingly holding the cutter out of operative position, means for limiting the outward movement of the cutter, an adjustable screw passing through the body, a plate movably secured to the lower end of said screw and substantially the same size as the socket in the body portion whereby said plate may be adjusted to and from the receiving opening formed therein, and means forming a part of the outer end of said screw whereby the plate is properly adjusted to vary the capacity of the socket, and the cutter thereby properly positioned upon the object to be operated upon.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LOUIS BAPTISTE.

Witnesses:
MARTIN C. SEEGUS,
E. C. COOPER.