

B. RADTKE.  
STOPPER EXTRACTOR.  
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985,548.

Patented Feb. 28, 1911.

Fig. 1

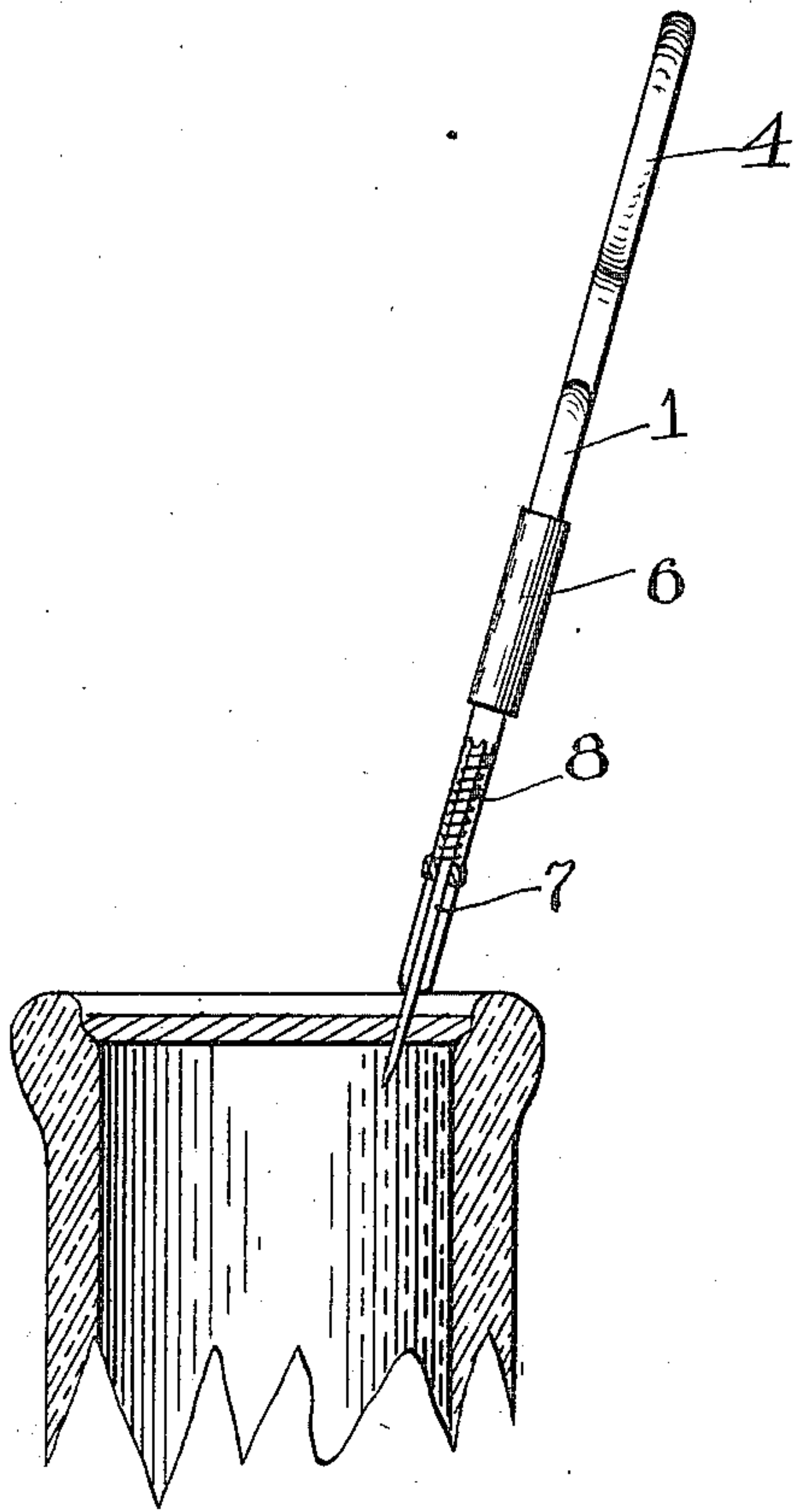


Fig. 2

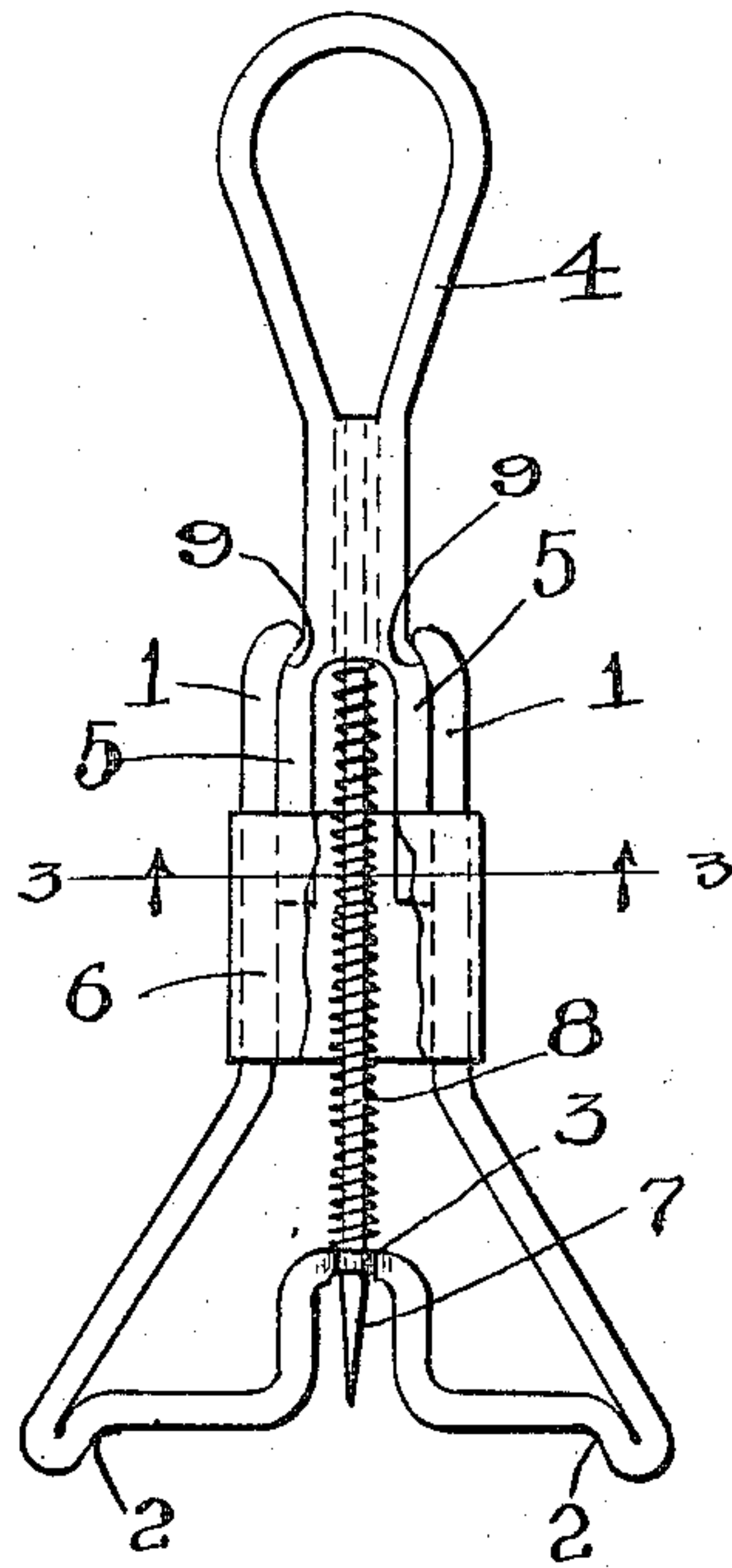


Fig. 3

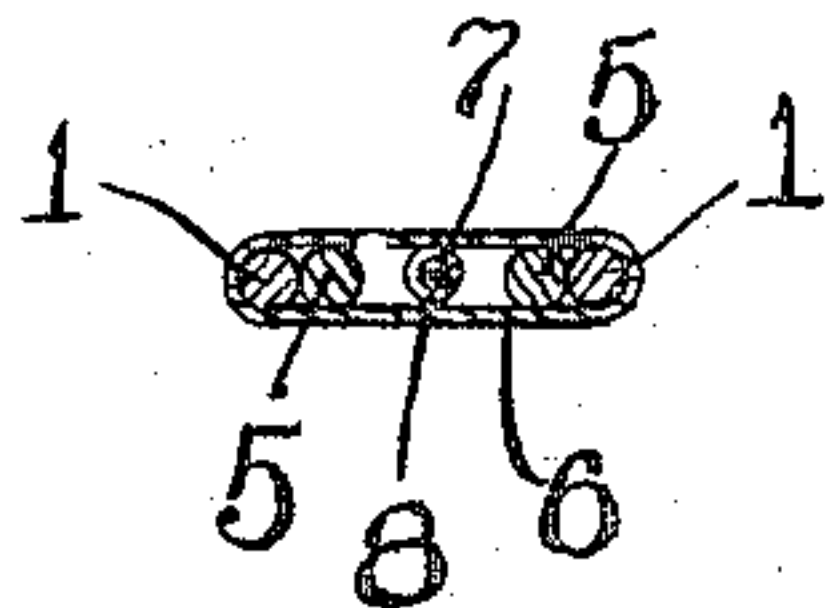
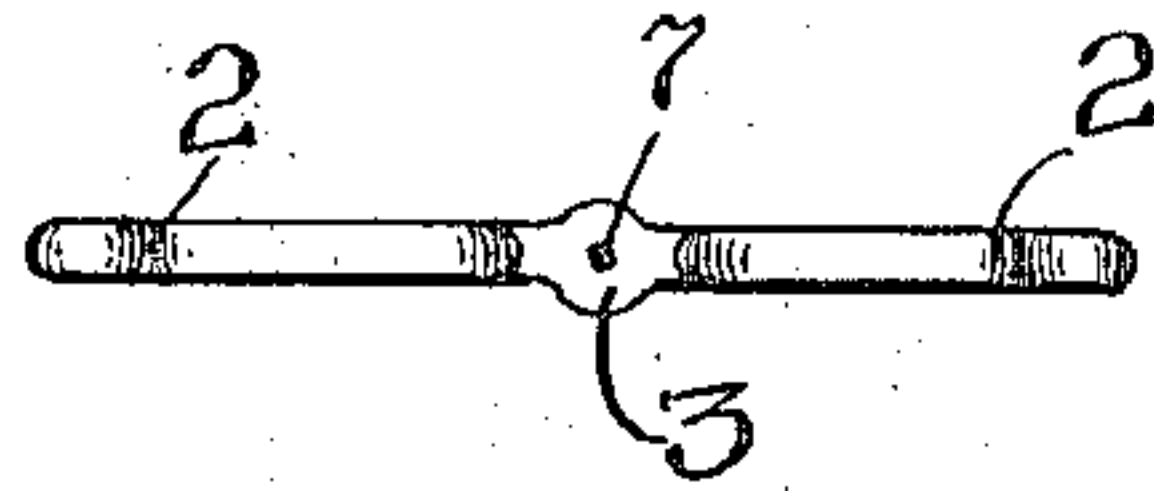


Fig. 4



WITNESSES

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# UNITED STATES PATENT OFFICE.

BRUNO RADTKE, OF CHICAGO, ILLINOIS.

STOPPER-EXTRACTOR.

985,548.

Specification of Letters Patent.

Patented Feb. 28, 1911.

Application filed March 7, 1910. Serial No. 547,678.

*To all whom it may concern:*

Be it known that I, BRUNO RADTKE, a subject of the Emperor of Germany, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Stopper-Extractors; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the numbers of reference marked thereon, which form a part of this specification.

Bottle closure extractors heretofore constructed for removing the composite closures from milk bottles have proven objectionable, owing to the fact that they either necessitated a straight pull on the closure or with those which pry or spring the closure out, the leverage is such that considerable force is required resulting in the closure being snapped out and usually spilling part of the contents of the bottle. Devices heretofore constructed are further objectionable owing to the fact that the sharp impaling points are exposed and subject to breakage.

It is an object of this invention to provide a device of the class specified, in which the impaling point is protected from breakage and dulling when the device is not in use.

It is further an object of this invention to provide a bottle opener which is provided with a base to support the device on the neck of the bottle when the closure is being extracted.

It is further an object of this invention to provide an exceedingly simple device which is efficient in operation and cheap to construct.

The invention consists of the matters hereinafter described and more fully pointed out and defined in the appended claims.

In the drawings: Figure 1 is a sectional view of device embodying my invention, illustrating the use thereof. Fig. 2 is a side view thereof with parts omitted. Fig. 3 is a section taken on line 3—3 of 2—2. Fig. 4 is a bottom plan view.

As shown in the drawings: A base or support is provided, which is constructed of a strip of wire or other suitable material. Said wire is shaped to provide parallel guide arms 1, from the lower end of which the wire is directed outwardly to the desired width of the base or support, and is then turned back upon itself, providing shoulders

2, to engage against the bead at the mouth of the bottle, and inset in the plane of the instrument forming a guide 3. Secured to slide within said guide arms 1, is a handle 4, which may be constructed of wire or other suitable material, and is provided with parallel arms 5, which engage within the arms 1, and are held in place by a keeper 6, which comprises a band of suitable material wrapped around the arms. Rigidly secured to said handle is a pin or impaling member 7, which extends through the keeper 6, and guide 3. A light spring 8, is secured around the pin and bears at one end on the guide 3, and at its opposite end against the handle, adapted to draw the point within the base to protect the same from breakage. The upper ends of the arms 1, are curved inwardly to engage shoulders 9, formed on the handle to limit the outward movement of the handle.

The operation is obvious. In the construction shown in Figs. 1 to 4 inclusive the head of the bottle engages within the shoulders 2, of the base, preventing the base slipping laterally from the bottle. The handle is depressed, forcing the impaling pin or point through the composition closure, and slight pressure on the handle, using the bottle neck as the fulcrum, forces the closure loose without any violent jerk, thereby avoiding spilling the contents of the bottle.

When the device is not in use the spring draws the impaling point within the base and thereby protects the same from piercing objects and eliminating the danger of breakage or dulling, should the device fall against any object.

Having thus described my invention I claim as new and desire to secure by Letters Patent—

1. In a device of the class described, a supporting member shaped to rest on the top of the neck of a bottle and to use the same as a fulcrum, a guide, a handle slidably connected to said support, a member provided with a sharp point secured to said handle and extending through said guide.

2. In a device of the class described, a supporting member shaped to rest on the top of the neck of a bottle, a guide provided therein, a handle slidably connected to said support, a member provided with a sharp point secured to said handle and extending through said guide adapted to be projected beyond the base, and a spring for holding

the pointed member with the point lying within the base when the device is not in use.

3. In a device of the class described, a supporting member, a guide therein, a  
5 handle slidably connected to said support, an impaling pin secured to said handle and extending through said guide adapted to be projected beyond the base, a spring for hold-  
ing the impaling pin within the base when  
10 the device is not in use and a band adapted

to hold the supporting member and handle in place.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

BRUNO RADTKE.

Witnesses:

K. E. HANNAH,  
LAWRENCE REIBSTEIN.

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