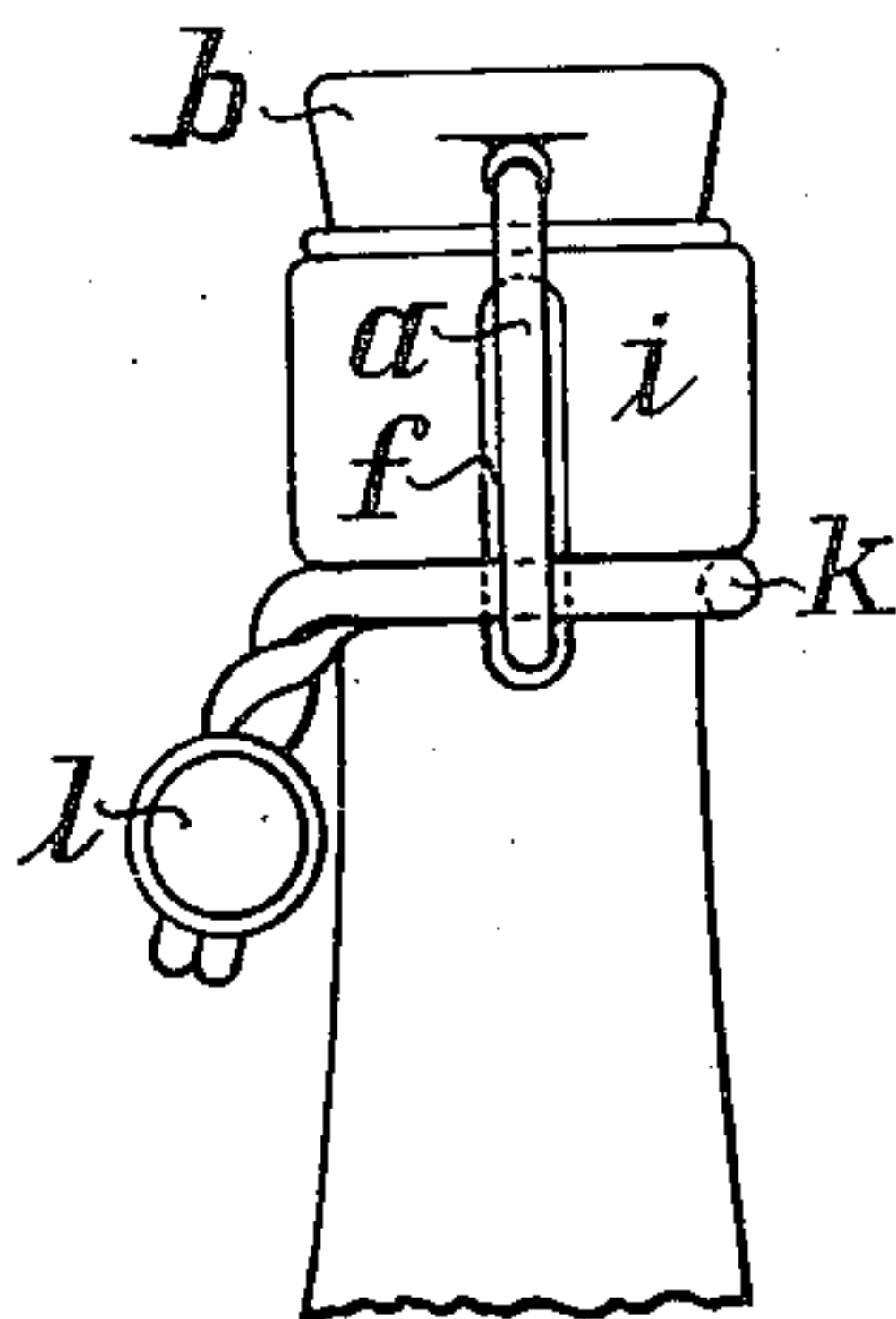


P. LEINBROCK.  
CLOSURE FOR BOTTLES AND LIKE VESSELS.  
APPLICATION FILED AUG. 19, 1908.

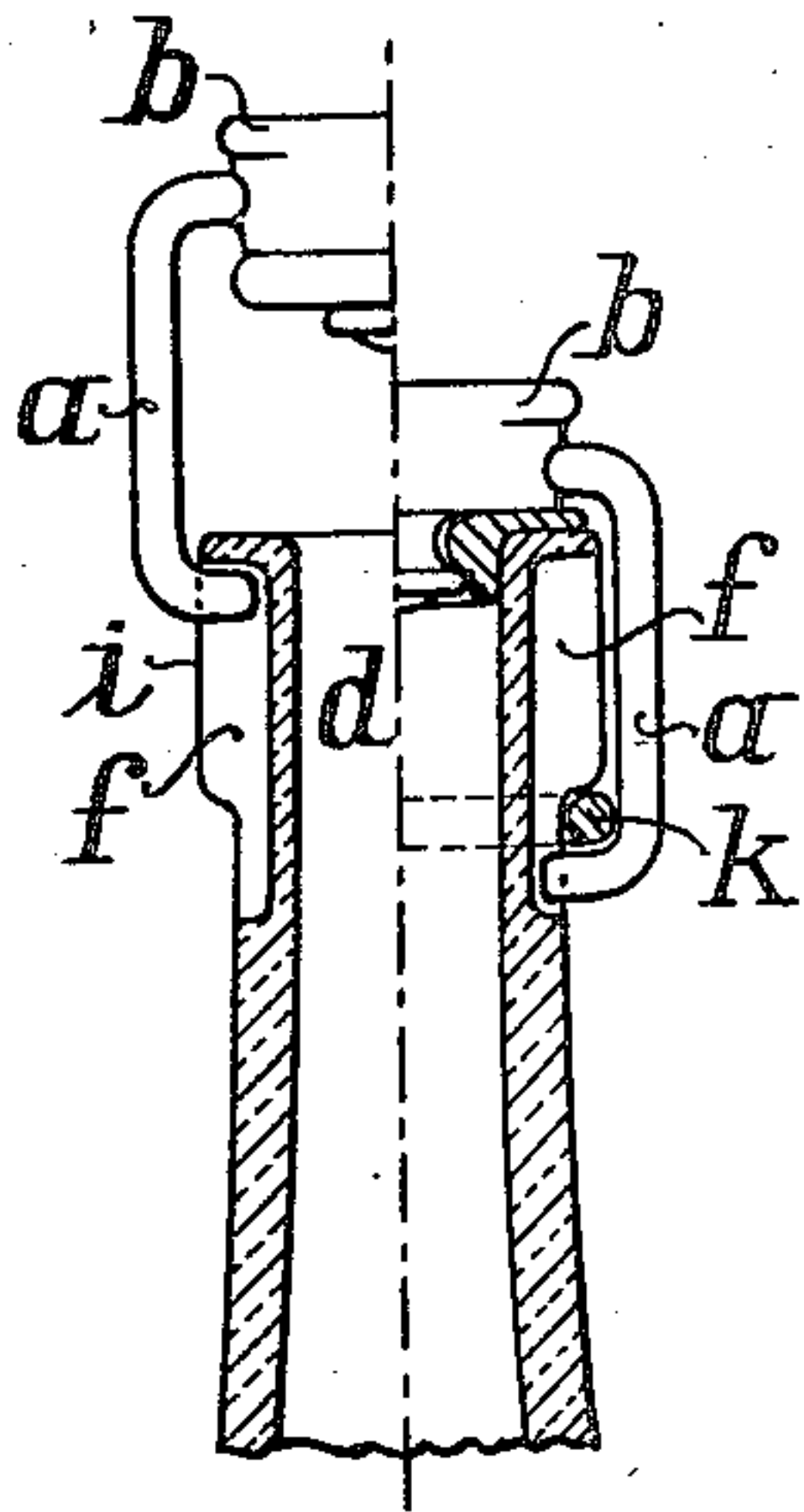
922,167.

Patented May 18, 1909.

*Fig.1.*



*Fig.2.*



*Witnesses:*  
*Otto W. Holmgren.*  
*J. George Barry.*

*Inventor:*  
*Paul Leinbrock*  
*By Brown & DeWard*  
*his Attorneys*

# UNITED STATES PATENT OFFICE.

PAUL LEINBROCK, OF COPITZ, NEAR DRESDEN, GERMANY.

## CLOSURE FOR BOTTLES AND LIKE VESSELS.

No. 922,167.

Specification of Letters Patent.

Patented May 18, 1909.

Application filed August 19, 1908. Serial No. 449,356.

*To all whom it may concern:*

Be it known that I, PAUL LEINBROCK, merchant, a subject of the King of Saxony, and resident of Copitz, near Dresden, Kingdom of Saxony, German Empire, have invented new and useful Improvements in Closures for Bottles and Like Vessels, of which the following is a specification.

This invention relates to closures for bottles and like vessels the necks of which are provided on their outer surface with vertical guiding grooves having closed ends and adapted to receive and guide the bent or hook-shaped lower ends of stopper carrying loops or closing wires in a direction parallel to the longitudinal axis of the neck.

My present invention contemplates the extension of these guiding grooves at the neck of the bottle into the head of the bottle and below the same so that the bent or hook-shaped ends of the wire which move in the guiding grooves on each side of the bottle neck are brought below the bottom edge of the bottle head when the bottle is to be closed, providing at the same time a wire, metal strip or the like placed tightly around the bottle neck beneath the bottom edge of the enlarged bottle head to serve as a securing device by passing it through the bent bottom ends of the loop wire which slide in the guiding grooves. By means of this wire or metal strip, the ends of which may be connected by a lead seal or the like, the loop or closing wire carrying the lid or stopper is prevented from moving upward since it is firmly held down in a fixed position by the wire or metal strip, thus insuring a tight closure of the bottle and at the same time providing against the opening of the bottle without disclosure, since, in order to open the bottle, it will be necessary to break the seal or sever the wire or metal strip in order to permit the bent ends of the closure loop to slide upwardly in the guiding grooves.

In the accompanying drawings, Figure 1 is a view in side elevation of a portion of the bottle head and neck embodying my invention and Fig. 2 is a vertical section at right angles to Fig. 1.

On the right half of Fig. 2, the orifice of the bottle is closed by the stopper, whereas the left side of this figure shows the stopper,

together with the loop wire carrying the same, shifted upward so far that the mouth of the bottle is disengaged from the stopper and may be entirely freed from the same by swinging the latter back together with its loop wire.

$a$  is the loop or closing wire bearing the stopper  $b$ . The bent or hook-shaped lower ends of the wire  $a$  are guided within the vertical grooves  $f$  running parallel to the longitudinal axis of the bottle and located throughout the greater part of its length in the bottle head  $i$ , extending a short distance only downwardly into the bottle neck itself. Around the bottle neck and immediately beneath the bottom edge of the bottle head  $i$ , a ring  $k$  in the form of a wire, metal strip or the like, is located, the two ends of which may be fastened together by means of a lead seal  $l$ . The bent lower ends of the loop wire  $a$  are placed beneath the ring  $k$  and tightly engage it. When the bottle is to be opened, the loop wire will not be allowed to slide upward within the guiding grooves  $f$  until the ring  $k$ , after cutting or releasing from the seal, has its ends freed so as to permit it to be shifted out of the way of the lower ends of the loop wire. When the ring is removed, the loop wire, together with the stopper  $b$ , may be moved upward as shown on the left side of Fig. 2, thereby disengaging the stopper from the mouth of the bottle when it may be swung from one side to completely open the bottle.

What I claim is:

1. The combination with the head and neck of a bottle or like vessel provided with grooves extending along the head and into the neck, of a closure, a loop for holding the closure, the ends of the loop being bent inwardly to travel along the said grooves, a retaining wire surrounding the neck of the bottle beneath the head for retaining the loop in position, and means for securing the ends of the surrounding wire against unintentional displacement.

2. The combination with a bottle head and neck provided with grooves extending along the head and into the neck, a bottle closure and a loop for holding the bottle closure, the said loop being provided with bent ends arranged to travel along said grooves, of a



wire adapted to surround the bottle neck beneath the head to lock the loop against vertical movement and a seal for securing the ends of the surrounding wire against unintentional displacement.

5 In testimony, that I claim the foregoing as my invention, I have signed my name in

presence of two witnesses, this eighth day of August 1908.

PAUL LEINBROCK

Witnesses:

ULYSSES J. BYWATER,  
PAUL ARRAS.