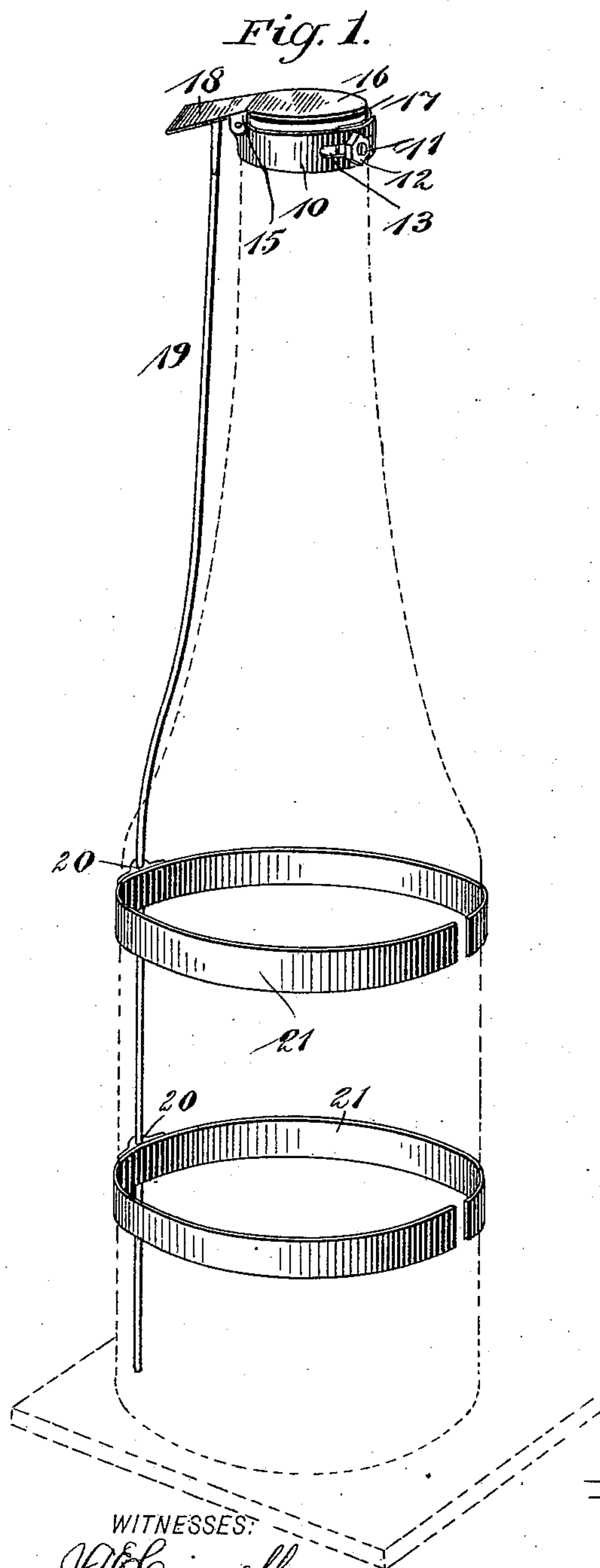


(No Model.)

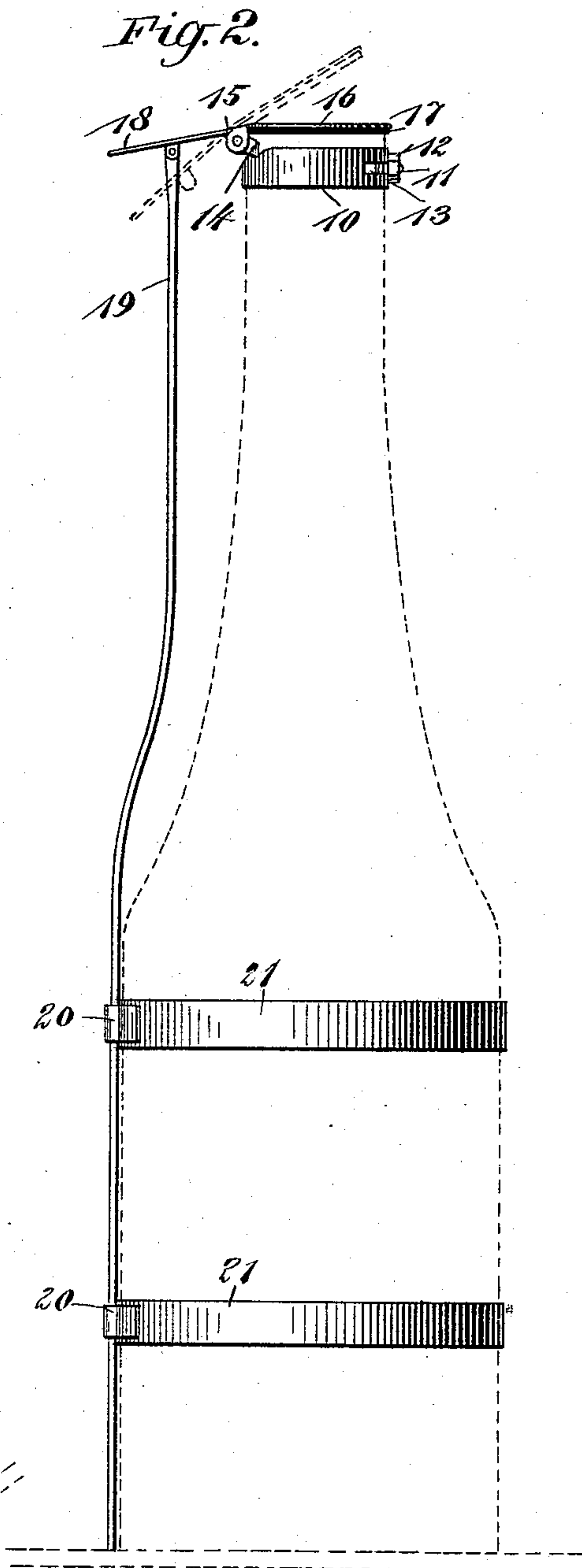
R. G. WILLIAMS.  
AUTOMATIC BOTTLE STOPPER.

No. 485,443.

Patented Nov. 1, 1892.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

RICHARD G. WILLIAMS, OF L'ANSE, MICHIGAN.

## AUTOMATIC BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 485,443, dated November 1, 1892.

Application filed July 26, 1892. Serial No. 441,276. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD G. WILLIAMS, of L'Anse, in the county of Baraga and State of Michigan, have invented a new and Improved Automatic Bottle-Stopper, of which the following is a full, clear, and exact description.

My invention relates to improvements in bottle-stoppers, and especially to stoppers for bottles—such as whisky and other liquor bottles—which are used over a bar, catchup-bottles, sauce-bottles, and in fact all bottles which need to be frequently opened and closed. It is well understood that in using bottles of the class referred to it is something of a nuisance to be compelled to cork and uncork the bottle frequently, and the object of my invention is to produce a stopper which will automatically open when the bottle is raised and will automatically and tightly close the bottle when the latter is set down upon a table or other support.

A further object of my invention is to construct the stopper and its operating attachments so that they may be conveniently applied to any ordinary bottle.

To this end my invention consists in certain features of construction and combinations of parts, as will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in both the views.

Figure 1 is a perspective view of the bottle provided with my improved stopper and with the stopper in a closed position, and Fig. 2 is a side elevation showing the stopper in full lines in closed position and in dotted lines in open position.

In connection with the stopper a metallic band 10 is used, which is adapted to encircle the neck of the bottle near the top, and the ends of the band are held together by a screw 11 and nut 12, although any suitable fastening may be used. One end of the band is slotted, as shown at 13, to receive the screw, and it will be seen that this construction enables the band to be securely fastened to bottle-necks of different sizes.

On the upper edge of the band and on one side are upwardly-extending ears or lugs 14,

to which are pivoted depending ears or lugs 15, which are turned down on opposite side edges of the bottle-stopper proper, which comprises a lid 16, to close the bottle-aperture, and an extension 18, projecting laterally from the lid. The lid 16 has a packing 17 of rubber or other suitable material, which causes an airtight closure to be effected when the lid is pressed downward upon the top of the bottle.

To the under side of the extension 18 is pivoted a rod 19, which extends downward and slides through keepers 20, these being secured to spring clasps or arms 21, which embrace the bottle and which have sufficient springiness to hold them in place thereon. The rod 19 approximates in shape to the side contour of the bottle, and the length of the rod is such that when the bottle is placed upon a table or other support the rod will be pushed upward so as to raise the extension 18 and tightly close the lid 16; but when the bottle is raised the rod will drop below the bottom of the bottle, thus permitting the lid to swing open. It will be understood that any suitable guide-keepers may be provided for the rod and that these may be fastened to the bottle in many ways. When the bottle sits upon a support, the weight of the bottle will cause the rod 19 to be pushed upward and this, acting on the extension-lid 18, will swing the lid 16 downward firmly upon the bottle-top, thus tightly closing the bottle. It will be noticed that the rod and lid have a lever action, the rod and extension serving as the long end of the lever and the pivot of the lid acting as the fulcrum. The instant the bottle is raised the weight of the rod 19 and extension 18 cause the rod and extension to drop and the lid flies open, so that the contents of the bottle may be easily poured out.

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

1. The combination, with a bottle, of a swinging lid to close the same and a sliding rod held on one side of the bottle and connected with the lid, so as to close the same when pressure is applied to the lower end of the rod, substantially as described.

2. The combination, with a bottle, of a lid hinged to the bottle top, so as to close the bottle, a laterally-projecting extension produced on one side of the lid, and a sliding rod se-



cured to the extension and extending downward on one side of and adapted to extend below the bottle, substantially as described.

3. The combination, with a bottle, of an adjustable band secured to the bottle neck, a swinging lid hinged to the band and adapted to close the bottle, and a sliding rod held to move in keepers on the side of the bottle and adapted to extend below the bottle, the rod being connected with the lid, so that when pressure is applied to its lower end the lid will be closed, substantially as described.

4. The combination, with a bottle, of a band

secured to the bottle-neck, keepers formed on arms or clasps which embrace the bottle, a swinging lid hinged to the neck-band and adapted to close the bottle, the lid having an outwardly-projecting extension, and a sliding rod held to move in the keepers and adapted to extend below the bottle-bottom, the upper end of the rod being secured to the extension of the lid, substantially as described.

RICHARD G. WILLIAMS.

Witnesses:

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