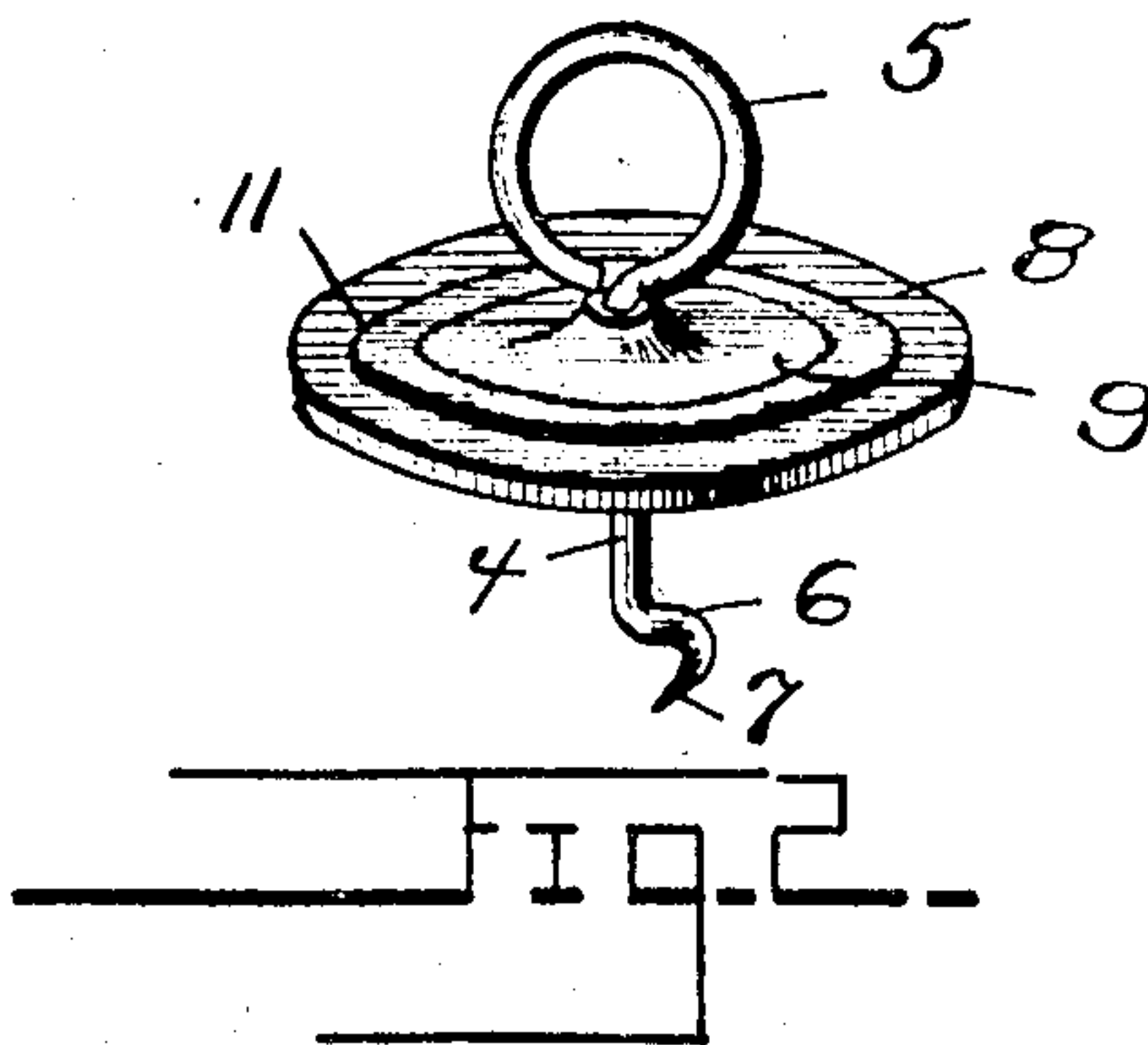
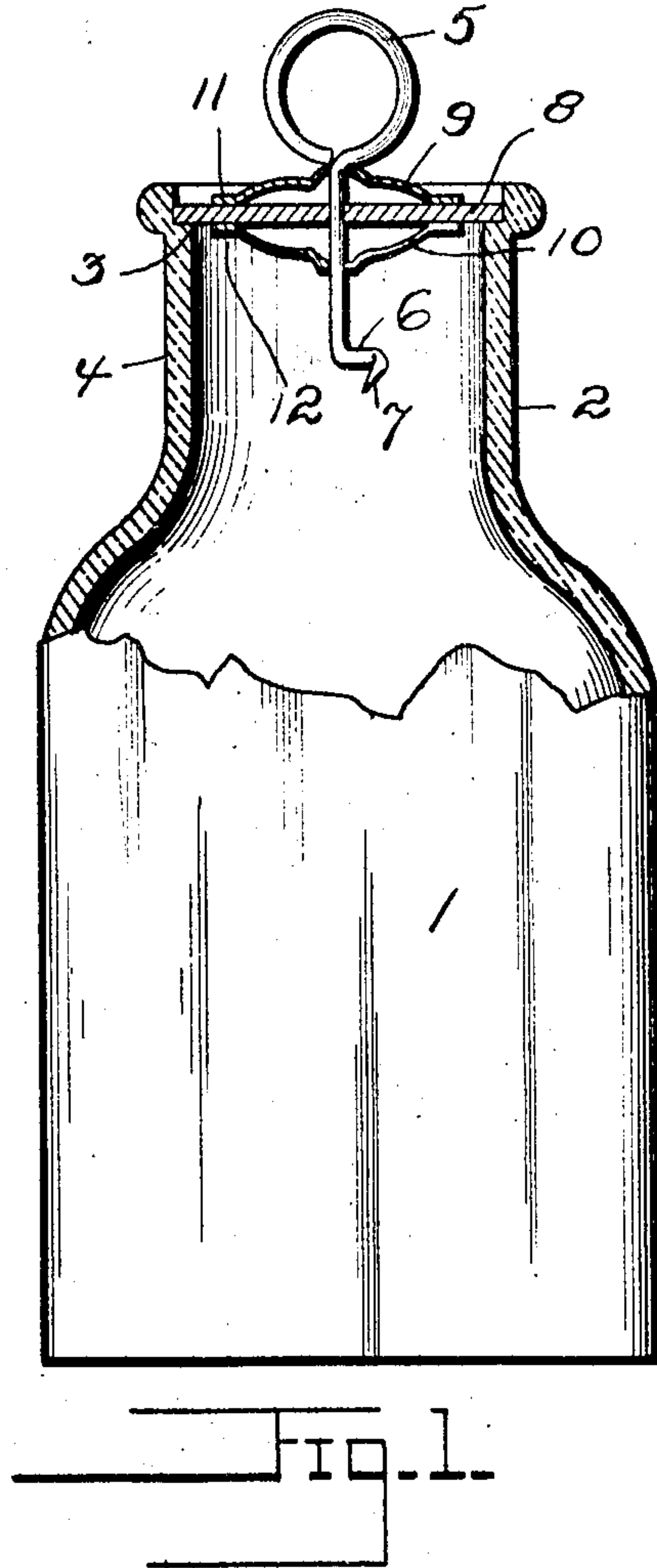


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 COMBINED BOTTLE CLOSURE AND STOPPER EXTRACTOR.  
 APPLICATION FILED DEC. 19, 1908.

927,732.

Patented July 13, 1909.



Witnesses  
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# UNITED STATES PATENT OFFICE.

CASPAR J. KORNDORFER, OF EAST ORANGE, NEW JERSEY.

## COMBINED BOTTLE-CLOSURE AND STOPPER-EXTRACTOR.

No. 927,732.

Specification of Letters Patent.

Patented July 13, 1909.

Application filed December 19, 1908. Serial No. 468,367.

*To all whom it may concern:*

Be it known that I, CASPAR J. KORNDORFER, a citizen of the United States, residing at East Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Combined Bottle-Closures and Stopper-Extractors, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to stopper extractors and bottle closures, and has specially in view a combined article of the type specified by means of which the usual stopper or seal of milk bottles &c. may be extracted with the minimum of labor and which is also provided with a bottle closure which will seal the bottle air tight so that the same may be kept in close contact with meats, vegetables, or other provisions without any danger of the bottle contents being contaminated by the odors from the same.

In carrying out the objects of the invention generally stated above it will of course, be understood that the essential features are susceptible of changes in details and structural arrangements, but a preferred and practical embodiment thereof is shown in the accompanying drawings, wherein—

Figure 1 is a view in side elevation of a milk bottle, the upper portion thereof being broken away to show the application of the present invention thereto as a closure. Fig. 2 is a detail perspective view of the improved combined extractor and closure.

Referring to said drawings by numerals, 1 designates an ordinary type of milk bottle, the neck 2 of which is provided with an interior annular seat 3 for the reception of a sealing disk. This described type of bottle is one well known and is shown as an example of the practical application of the improved extractor and closure, but it will, of course, be readily understood that the invention may be used in connection with other types of bottles.

The extractor and closure consists primarily of a single length of strong wire or rod the main straight body portion 4 of which has one end bent into circular formation to provide a finger pull 5, and its other end portion is bent at right angles to the body portion as indicated at 6 and which terminates in a downwardly inclined penetrating point 7, the arrangement being such

that when said penetrating point 7 is forced through a sealing disk, and the extractor given a slight turn, the angular portion 6 will engage under the sealing disk, so that the same may be readily lifted from the bottle by a pull upon the extractor.

A disk 8 is carried by the body 4 of the extractor, said disk being preferably of rubber or other suitable resilient material, and is of a size sufficient to have a tight wedging fit within the neck of the bottle so as to close the same absolutely air tight. The disk 8 is held in a flat, bottle closing position by means of concaved washers 9 and 10, which are soldered or otherwise permanently attached to the body 4 of the extractor. Said washers are of circular formation and have their outer edges flattened to form gripping flanges 11—12, and are arranged one above and the other below the disk 8 so that said disk is held between said washers in such a manner that the necessary rigidity is imparted to the same to cause it to remain in a flat condition.

It will be seen from the foregoing that the present invention provides a simple and inexpensive extractor and closure, and one in which the original bottle sealing disk may be quickly and easily extracted, after which the bottle may be sealed by means of the described closure so that there is no danger of the contents thereof being damaged. And it will also be understood that through the described opposing washers, the pressure of the same is at all times being exerted to retain the closure disk in the proper flat bottle sealing condition.

Claim:—

A combined extractor and closure, comprising a single length of material having one end bent to form a handle and the other end portion bent at an angle and terminating in a downwardly inclined penetrating point, a flat resilient disk carried by said body, and upper and lower washers carried by said body and having their outer edges bearing upon opposite sides of said disk.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

CASPAR J. KORNDORFER.

Witnesses:

D. W. GARDNER,  
GEO. WM. MIATT.