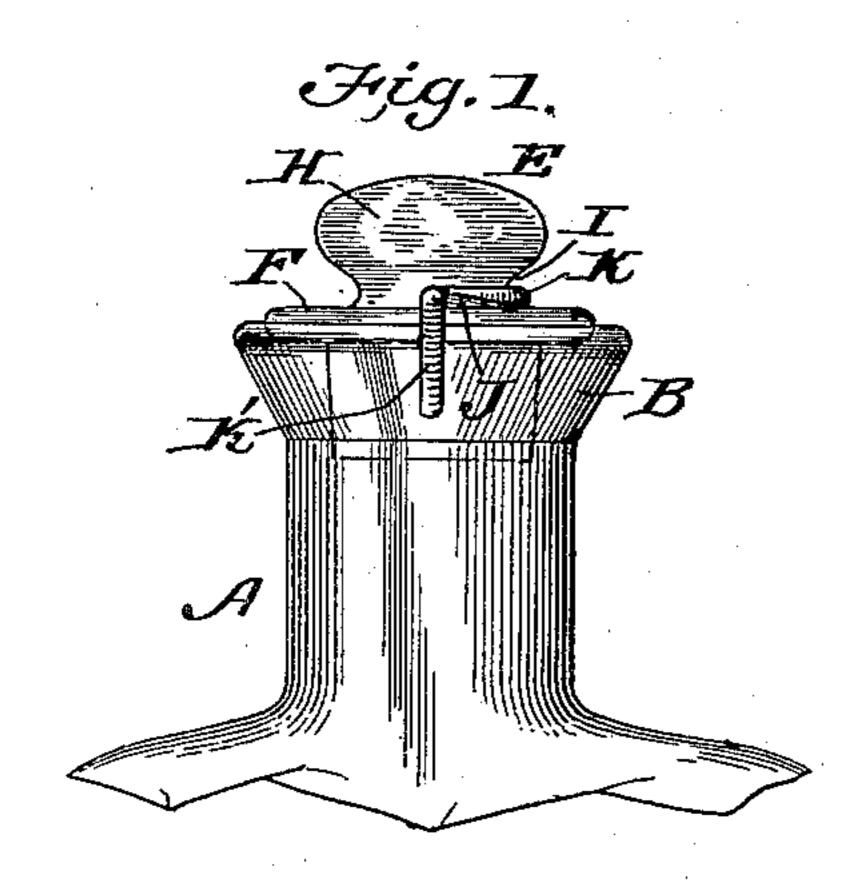
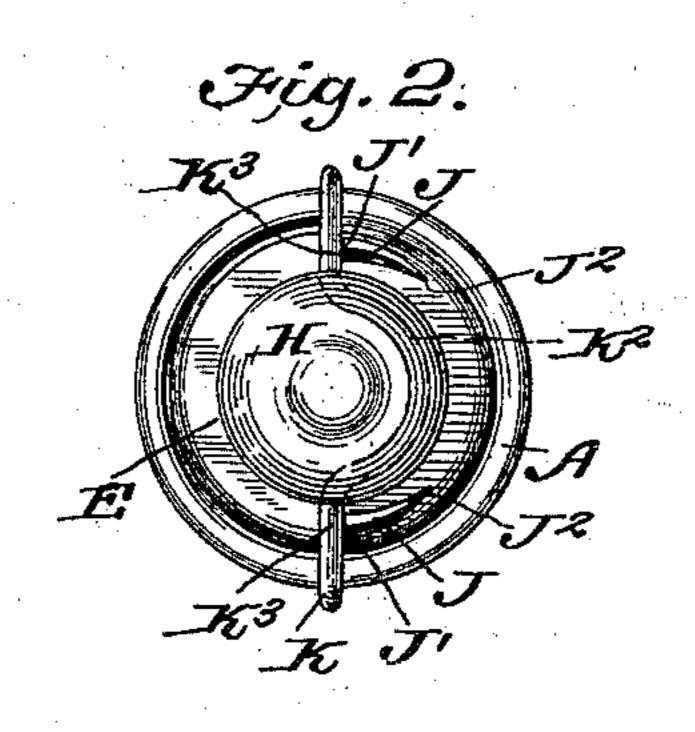
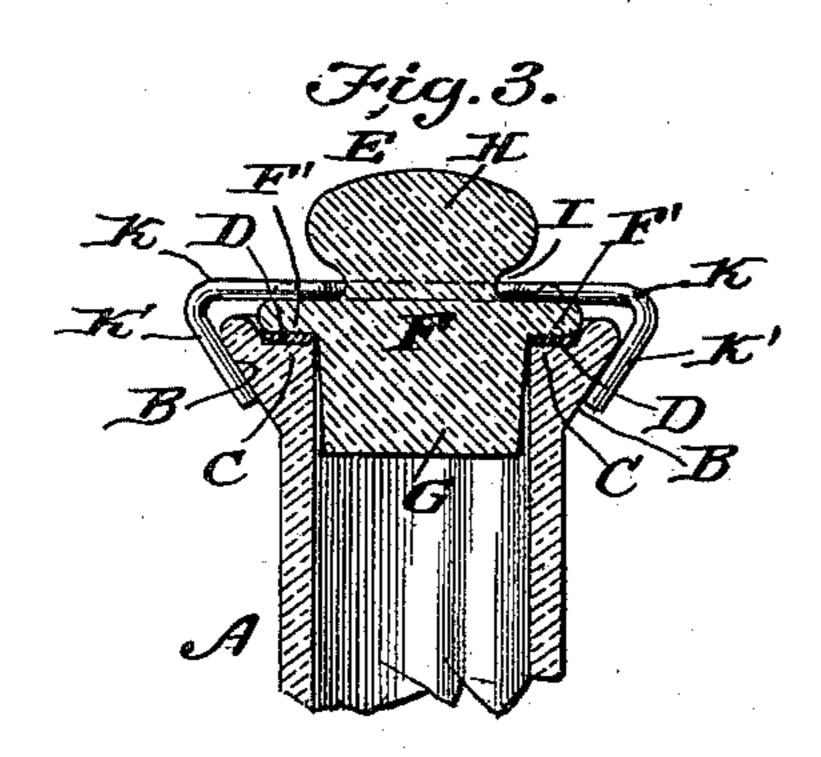
## J. SCHIES. JAR CLOSURE.

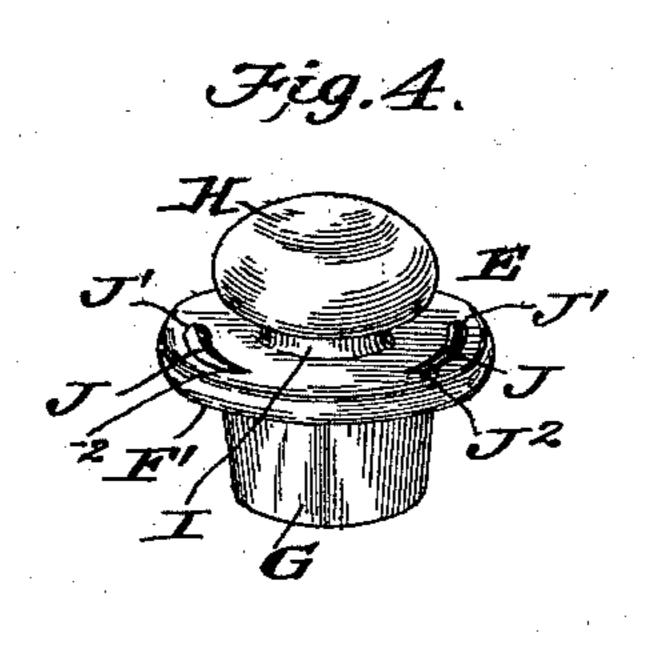
(Application filed Mar. 9, 1898.)

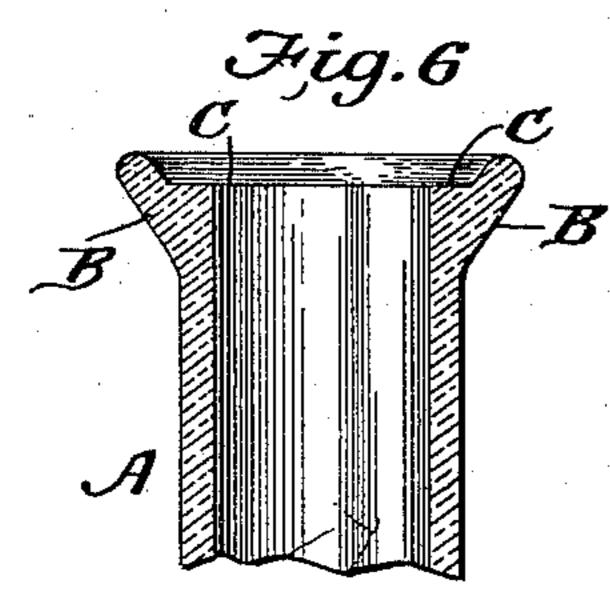
(No Model.)



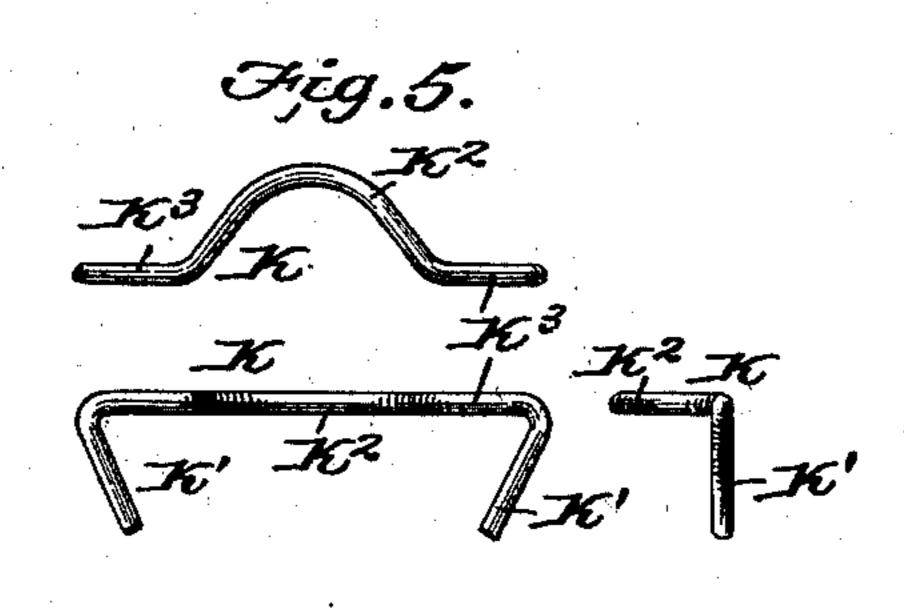








WITNESSES: MAS, Bloudel. PB, Zurpin.



JOHN Schies,

BY Munical Constitutions

ATTORNEYS.

## United States Patent Office.

## JOHN SCHIES, OF ANDERSON, INDIANA.

## JAR-CLOSURE.

SPECIFICATION forming part of Letters Patent No. 612,678, dated October 18, 1898.

Application filed March 9, 1898. Serial No. 673,172. (No model.)

To all whom it may concern:

Be it known that I, JOHN SCHIES, of Anderson, in the county of Madison and State of Indiana, have invented a new and useful 5 Improvement in Jar-Closures, of which the following is a specification.

My invention is an improvement in jarclosures, which can be embodied in all sizes

of jars or bottles, as may be desired.

The invention aims to provide a simple and novel form of fastener and of stopper, together with a mouth and neck conformed to and cooperating therewith by which a secure and tight closure is effected, the whole pre-15 senting an attractive appearance; and the invention consists in certain novel constructions and combinations of parts as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a side view. Fig. 2 is a top plan view, and Fig. 3 is a vertical longitudinal section of a part of a jar having my improved closure. Fig. 4 illustrates the stopper in detail. Fig. 5 illustrates 25 the clamp-rod in detail, and Fig. 6 illustrates

the jar-mouth in detail.

The "jar" A, in which term I would include, in connection with the conventional shape usually so termed, any desired proportion of 30 bottle, may be designed in any suitable form, and has at its mouth the external sloping sides B, which flare outwardly in an upward direction. Within its mouth the jar has the upwardly-facing shoulder C, forming a seat

35 for the gasket D.

The stopper E is formed with the body F, whose under side or shoulder F' opposes the shoulder C, the stem G, which depends within and fits the neck of the jar, and the head H, 40 which projects up from the center of the body F at the top and is preferably grooved or undercut at its base at I to give the knob-like form to the head and also to receive the lateral bow at the center of the clamp bar or 45 rod presently described.

On the upper side of the body F, I provide the stops J, whose square shoulders J' face in the same directions and which gradually slope or incline from such shoulders J' at J<sup>2</sup> 50 toward their opposite ends, where they merge

in the top surface of the body F.

The clamp bar or rod K is preferably a

length of suitable wire having at its ends the downturned and inwardly-inclined arms K', which conform to and bind against the slop- 55 ing sides B of the jar-mouth and is provided at its middle with a lateral bow K2, which in the closed position of the parts lies in the groove I, the portions of the clamp at K<sup>3</sup> engaging with the square shoulders J' of the 60 stops J and locking the stopper in place.

The gasket D encircles the stem G and bears between the shoulders F' and C, as shown,

forming a tight seal.

In operation the stopper is inserted and the 65 clamp applied with its arms K' beneath the sides B and the hollow of its bow K<sup>2</sup> facing the head H and the parts K<sup>3</sup> in position to ride up the sloped sides of the stops J, when the clamp-bar may be forced laterally into 70 locked position. To unlock the bar, it is only necessary to lift one of its parts K2 over the shoulder J' with which it is engaged, which may be done by upward pressure directly beneath said portion by means of a suitable im- 75 plement—such, for instance, as a small screwdriver—or by upward pressure on the lower ends of the arms K', or in other suitable manner, as may be desired.

Having thus described my invention, what 80 I claim as new, and desire to secure by Letters

Patent, is—

1. In a jar-closure, a stopper having on its upper side a central upwardly-projecting undercut head and provided on opposite sides 85 of said head with stop projections having at one end stop-shoulders and sloping toward their other ends the stop-shoulders facing in the same direction, the stop projections inclining upward in opposite directions with respect 90 to a circle described from the axis of the stopper substantially as set forth.

2. In a jar-closure, substantially as described, a clamp bar or rod having at its ends the downturned and inwardly-inclined arms 95 extending on practically straight lines from their juncture with the body of the clampbar to their extremities and arranged in approximately the same plane with each other and in a plane at right angles to that of the roo lateral bow, and the body of the clamp-bar being provided at its middle with a lateral bow which is open at one side and is formed on a circle centering approximately in line

with the portion of the clamp-bar between the lateral bow and the downturned arms, all substantially as and for the purposes set forth.

5 3. The improved jar-closure consisting of the jar having its mouth formed with an external flare and with a seat for the gasket, the stopper having a shoulder to fit upon said seat and provided on its upper side with the central undercut head and having on opposite sides of said head cam-like stop projections which slope or incline upward from one end toward their other ends and having at the

latter stop-shoulders facing in the same direction, such stop projections inclining upward in opposite directions with respect to a circle described from the axis of the stopper and the clamp-bar having at its middle the lateral bow open at one side and formed on a

•

circle centering approximately in line with 20 the portions of the clamp-bar between said bow and its ends and having at the opposite ends of such clamp-bar the downturned and inwardly-inclined arms extending on practically straight lines from their juncture with 25 the body of the clamp-bar to their extremities and arranged in approximately the same plane with each other and in a plane at right angles to that of the lateral bow, the said arms being arranged to engage the flared side 30 of the jar-mouth and the lateral bow to engage the undercut head of the stopper, all substantially as and for the purpose set forth.

JOHN SCHIES.

Witnesses:

KATHARINE ARDERY, EDWARD D. REARDON.