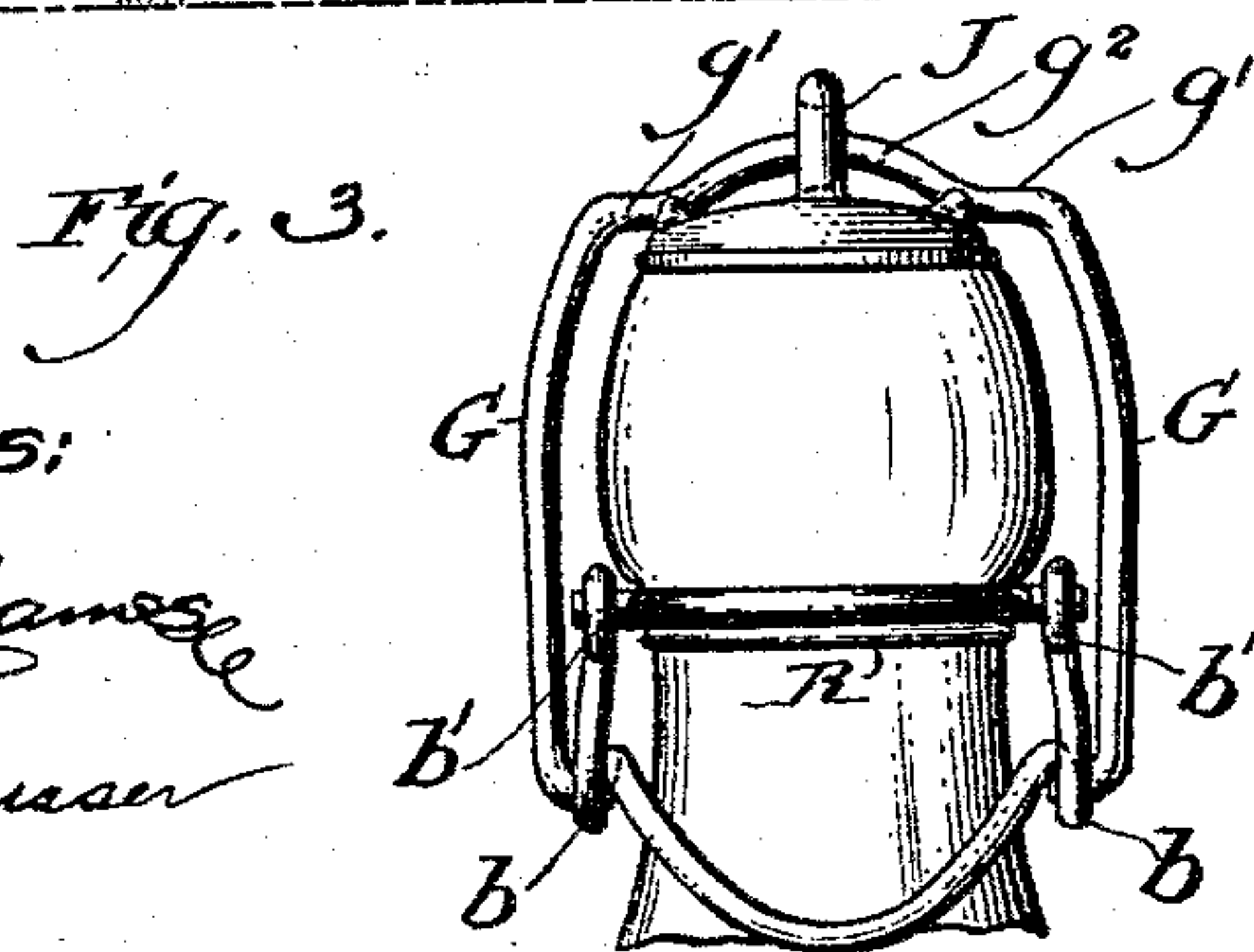
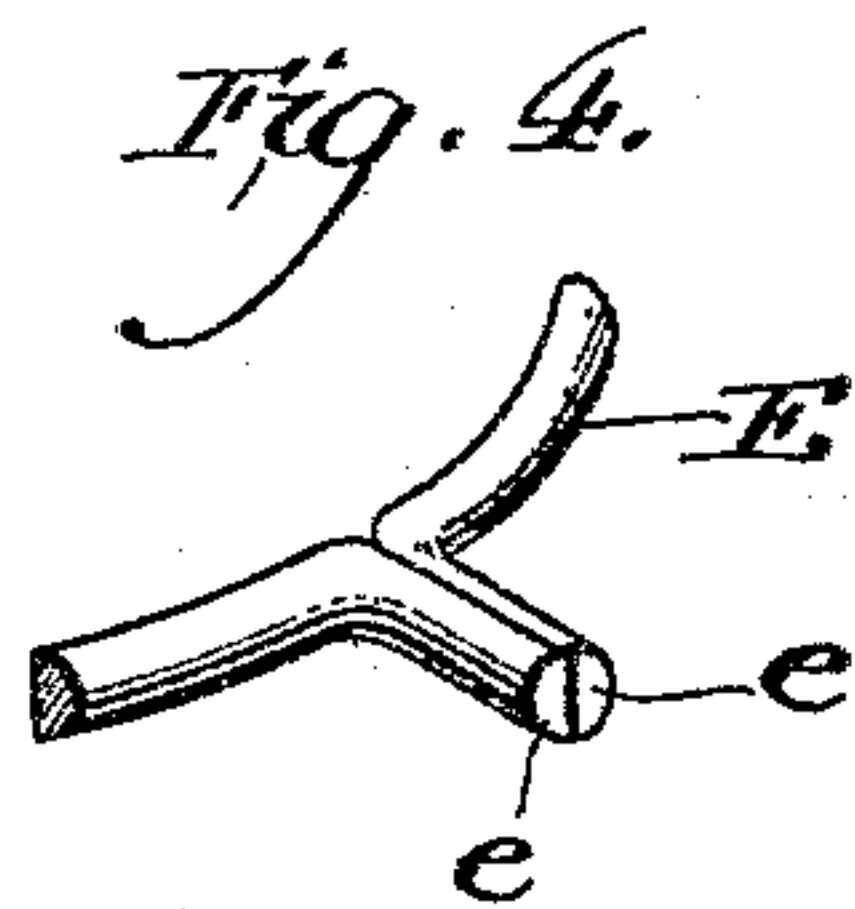
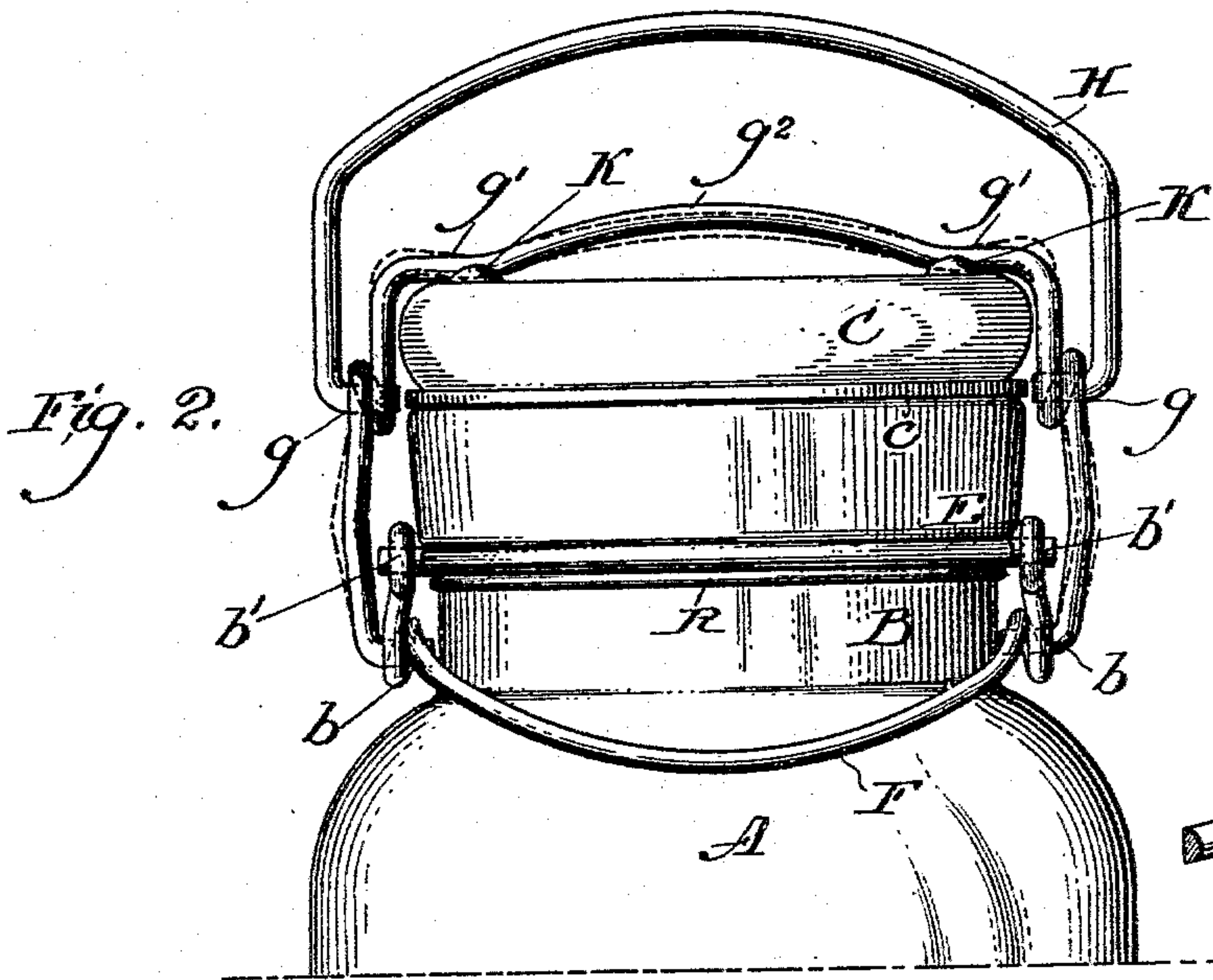
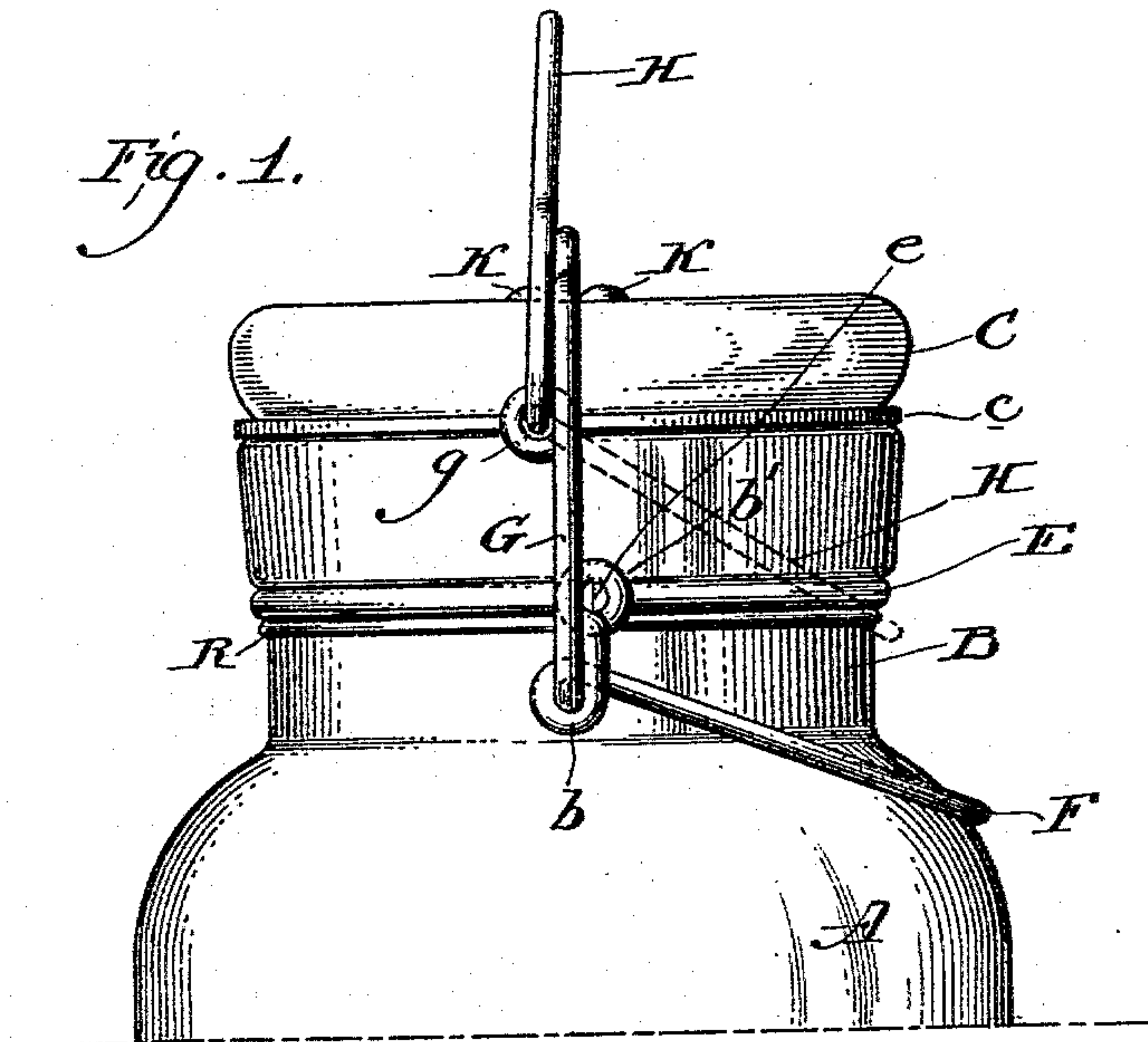


(No Model.)

C. FISCHER.
FASTENER FOR GLASS OR OTHER VESSELS.

No. 515,579.

Patented Feb. 27, 1894.



WITNESSES:
Leah Williams
Frank A. Bussan

INVENTOR:
Charles Fischer
W. H. Hendley

UNITED STATES PATENT OFFICE.

CLEOPHAS FISCHER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
SALMON B. ROWLEY, OF SAME PLACE.

FASTENER FOR GLASS OR OTHER VESSELS.

SPECIFICATION forming part of Letters Patent No. 515,579, dated February 27, 1894.

Application filed December 13, 1893. Serial No. 493,535. (No model.)

To all whom it may concern:

Be it known that I, CLEOPHAS FISCHER, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Fasteners for Glass or other Vessels, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates specifically to the following:—First. Improvement in the construction of the neck wire and its connection with the lever, whereby the neck wire may be more easily secured on the bottle and connected with the lever. Second. In certain improvements in the bail, so that the movement of the lever will cause the bail to exert a greater pressure upon and more securely fix in place the cap, also that the pressure of the bail will be upon the periphery in place of the center of the cap. Third. In a certain improvement in the construction of the cap so as to form a seat and guide for the position of the bail. Fourth. In the addition of an extra bail secured at a certain point for the purpose of enabling the jar to be carried.

I will first describe the embodiment of my invention as shown in the drawings and then particularly point out the same in the claims.

In the drawings—Figure 1 is an edge view of a portion of the jar with my invention applied. Fig. 2 is a side view of same. Fig. 3 is a side view of portion of bottle with my invention applied. Fig. 4 is a perspective view of portion of neck wire showing construction at the point of attachment of the lever.

Speaking of Figs. 1, 2 and 4, A is the jar provided with the neck, B. C is the cap adapted to rest upon a ledge in the neck of said bottle. *c* is a rubber washer interposed between the cap and the ledge. E is the neck-wire, which, as shown, is formed of metal strips flat upon one side and rounded on the other. Two strips are used and the ends of each strip are bent to have the projecting portions, *e* (see Fig. 4). The strips used are of different lengths, so that the juncture of the two strips shall be eccentric to the center of the neck or cap of the jar. F is the compress-

ing lever, the metal of the two ends of which is bent upon itself to form two loops, *b'*, *b'*, at each end, the loops *b'* slipping over the ends *e*, *e*, of the neck wires, and thus holding the neck-wire in place. The lever F is also bent to form the loops, *b*, *b*. G is the bail the ends of which are bent and inserted in the loops, *b*. On each side this bail is bent upon itself to form the torsion spring, *g*. The portion of the bail which passes over the top of the cap is bent in a peculiar manner. It is first bent concave at the points, *g'*, where it finds a bearing upon the two projections K, K, the metal being of greater cross-section than the space between these projections. These projections K, K, are preferably formed of glass as is the cap, and can be formed with the cap at the time of its manufacture. From the points, *g'* the bail is convexed so as to form an arch between these points, and, the metal being resilient, when pressure is applied to the bail, that portion acts as a spring. H is an additional bail, the ends of which are bent and rest in the eyes formed in the bail, G, at the points, *g*, *g*. The purpose of this bail is, in case the jar is hot, by reason of being externally heated or by the insertion of heated material, the jar can be carried by this bail avoiding the necessity of grasping the jar itself.

Upon the neck of the bottle may be formed, if desired, the encircling ridge R, for the purpose of preventing the neck wire from sliding down from its proper position on the neck.

In Fig. 3 I have shown my improvement as applied to a bottle. In this the parts are the same, differing only in size, with the exception that in this case the cap has the rubber attached to it, and in order to secure the cap a loop J is formed in the cap through which the bail, G, passes. Also the extra bail H is dispensed with.

When operating the device, the lever is forced downward, forcing the portion, *g'*, of the bail against the cap, C, forcing said cap downward. The movement of the lever, the points, *e*, *e*, being fixed, causes the bent ends of the lever to act as a spring, and also the portion, *g* and *g*², of the bail, act also as springs, so that the movement of the lever

not only forces the cap down by the direct pressure exercised, but by that and the additional pressure produced by the actions of the springs formed by the ends of the lever 5 and the springs, g and g^2 , of the bail, the pressure upon the cap is also at two points of its periphery, and therefore more advantageous than applied at the center, so that a great pressure is exerted upon the cap to force 10 it tightly in place, and when the lever has passed the center, the springs before described assist in holding the cap firmly in position.

The construction of neck wire and its method of connection with the lever are advantageous, as the neck wire is secured in position with less trouble and more rapidly than 15 if the neck wire were twisted to hold it in position, also the connection of lever and neck wire shown can be readily made.

20 I have shown my invention as applied to a jar and a beer bottle, but I do not intend to limit myself to its application to any specific form of jar or bottle; nor do I intend, except in those, to limit myself to the use of all the 25 features above described in one structure, except in those claims wherein they are so claimed.

Having now fully described my invention, what I claim, and desire to protect by Letters 30 Patent, is—

1. In a fastener for glass and other vessels, the combination of a neck-wire consisting of two parts adapted to surround the vessel and the adjacent ends of which are adapted to be 35 bent outwardly, a compressing lever having two pairs of loops, one pair of which are adapted to receive the neck-wire ends, and a bail or yoke the ends of which are adapted to rest in the other pair of said compressing lever 40 loops, substantially as described.

2. In a fastener for glass and other vessels, the combination of a bail or yoke having loops, a handle the ends of which are adapted to set in said loops, a neck-wire consisting of 45 two disjointed semi-circular wires adapted to surround the vessel and the corresponding ends of which are adapted to be bent outwardly and adjacent to each other, and a compressing lever having two pairs of loops, one 50 pair of which are adapted to receive the neck-wire ends and the other pair of which are

adapted to receive the ends of the bail or yoke, substantially as described.

3. The combination with a top or cover for glass and other vessels having two pairs of 55 beads, K , a bail or yoke having loops for the reception of the ends of a handle and adapted to extend over the top of said cover and make contact therewith at two points near the circumference thereof, and being bent between 60 said contact points above the plane thereof, a neck-wire consisting of two disjointed semicircular wires adapted to surround the vessel and the adjacent ends of which are adapted to be bent outwardly, and 65 a compressing lever having two pairs of loops, one pair of which are adapted to receive the neck-wire ends and the other pair of which are adapted to receive the ends of the bail or yoke, substantially as described. 70

4. The combination with a top or cover for glass and other vessels, of a fastener consisting of a bail, a neck-wire and a compressing lever, said bail being adapted to extend over 75 the top of the cover and make contact therewith at two points near the periphery thereof, and being provided with an upwardly-bent spring portion between said contact points, and an outwardly bent spring portion beyond 80 said contact points and periphery, substantially as described.

5. The combination with a top or cover for glass and other vessels, of a fastener consisting of a bail, a neck wire and a compressing lever, said bail being adapted to extend over 85 the top of the cover and make contact therewith at two points near the periphery thereof, and being provided with an upwardly-bent spring portion between said contact points and an outwardly bent spring portion beyond 90 said contact points and periphery, and said top or cover being provided with pairs of beads at the points of contact of said bail, the space between said beads being less than the width of the bail, substantially as described. 95

In testimony of which invention I have hereunto set my hand.

CLEOPHAS FISCHER.

Witnesses:

FRANK S. BUSSE,
JOHN T. CARR.