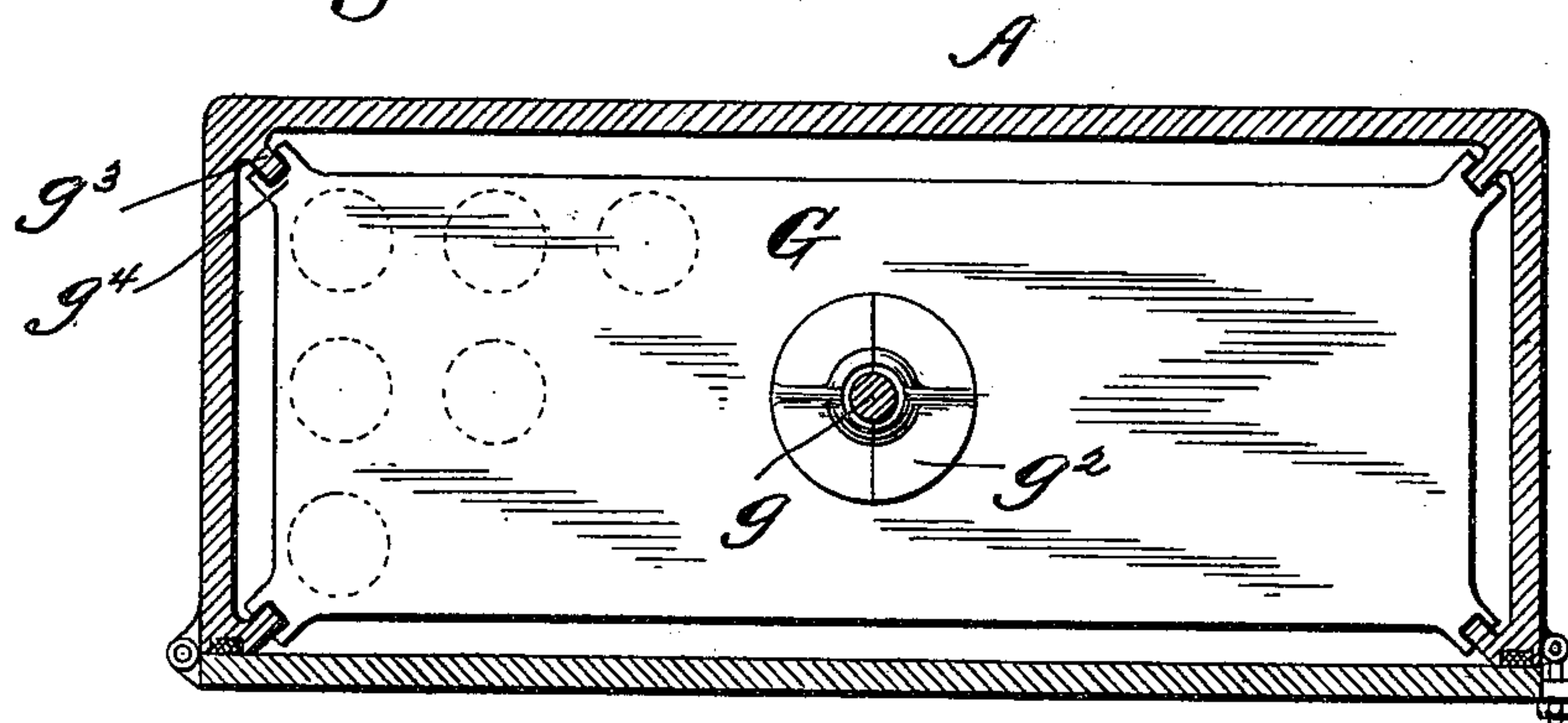
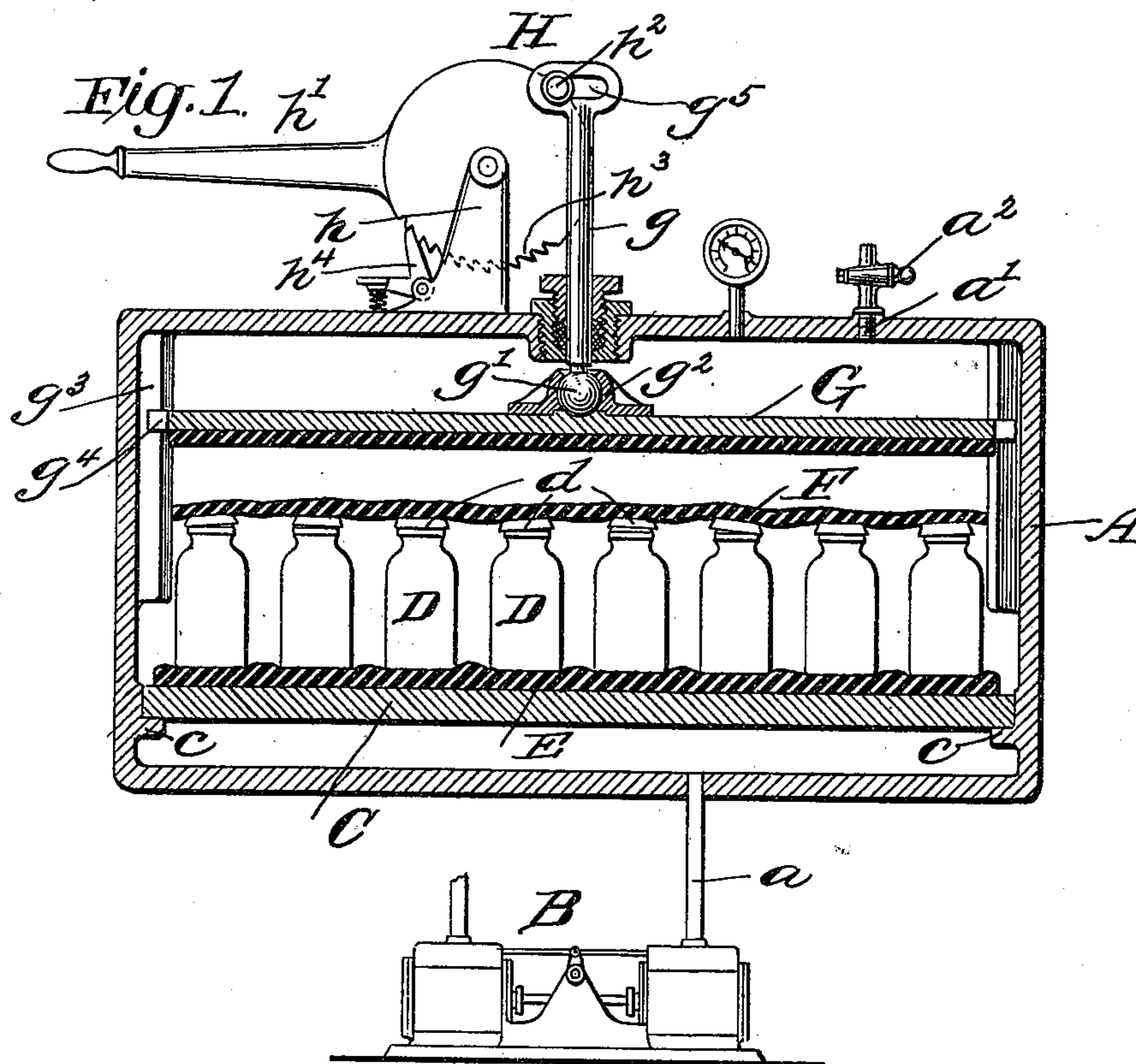


**Patented Apr. 9, 1901.**

# APPARATUS FOR SEATING AND SEALING COVERS ON CANS, JARS, &c.

(Application filed Mar. 16, 1900.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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APPARATUS FOR SEATING AND SEALING COVERS ON CANS, JARS, &c.

SPECIFICATION forming part of Letters Patent No. 671,930, dated April 9, 1901.

Application filed March 16, 1900. Serial No. 8,978. (No model.)

*To all whom it may concern:*

Be it known that I, EVERETT K. LEFFINGWELL, a citizen of the United States of America, residing in Upper Montclair, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Apparatus for Seating and Sealing the Covers on Cans, Jars, &c., of which the following is a specification.

10 My invention relates to apparatus for seating and sealing the covers on cans, jars, &c. I will describe such an apparatus embodying my invention and then point out the novel features thereof in the claims.

15 In the accompanying drawings, Figure 1 is a view, partly in vertical section and partly in elevation, of an apparatus for seating and sealing the covers on cans, jars, or other receptacles, embodying my invention. Fig. 2 is a horizontal sectional view. Fig. 3 is a detail top view.

Similar letters of reference designate corresponding parts in all of the figures.

25 A represents a suitable retort, which is provided with an air-tight door, (not shown,) and B an air-pump, by means of which the retort and any of the receptacles therein may be exhausted of air through a connecting-pipe *a*.

30 *a'* represents a pipe or other conduit which forms a communication between the outside air and the interior of the retort. A valve *a*<sup>2</sup> is provided in this conduit, which valve opens and closes the conduit.

35 Provided within the retort is a support C for cans, jars, or other receptacles D. The support may be of any desired form. It is here shown as a shelf, supported by angle-irons *c*. An elastic or yielding covering E is provided on the support, on which the cans or jars rest. It is here shown as being of rubber. The purpose of this yielding covering is to permit of the cans or jars being leveled and also to permit of their giving under pressure when their covers are to be seated.

45 Each can, jar, or other receptacle is provided with a cover *d*, which covers are loosely placed on the jars when the jars are placed within the retort. This is to permit of the air within the jars being exhausted by the pump B. During the exhaustion of air the covers are prevented from being displaced

by a flexible blanket F, which rests on the covers. This blanket serves in a measure to level the covers should any of them be tilted.

55 G represents a platform provided within the retort, and *g* a rod which serves to raise and lower the platform and hold it in either its raised or lowered position. The rod is provided with a ball *g'* at one of its ends, which ball is held within a suitable socket *g*<sup>2</sup>, carried by the platform. This connection permits of the platform adjusting itself to any inequalities of the covers caused by their being in tilted positions on the cans or jars. When, however, pressure is applied to the 65 rod, the pressure will be distributed over the platform, thereby causing all of the covers to be leveled and forced to their seats.

70 *g*<sup>3</sup> represents rods provided within the retort, and *g*<sup>4</sup> forked pieces carried by the platform and embracing the rods. The function of these parts is to cause the platform to be lowered and raised in a substantially horizontal position. They may, however, be dispensed with. 75

One end of the rod *g* is without the retort, and to this end are connected means for reciprocating the rod, and thereby raising and lowering the platform. These means may comprise an eccentric H, suitably journaled 80 in standards *h*, a lever *h'* for turning said eccentrics, and a pin *h*<sup>2</sup>, forming a connection between the eccentric and the slotted end *g*<sup>5</sup> of the rod *g*. The eccentric is also provided with teeth *h*<sup>3</sup>, with which a pawl or dog *h*<sup>4</sup> 85 engages for the purpose of holding the eccentric when it is operated to lower the platform. Any means may be provided for preventing the accidental lowering of the platform. If desired, the lever *h'* may be of such weight as 90 to serve as a counterbalance for the platform at the platform's raised position.

The operation of the apparatus will be readily understood. The cans, jars, or other articles on which the covers are to be seated 95 and sealed are placed within the retort, with the covers loose thereon. The blanket is placed on the covers and the retort sealed. Air is exhausted, and after the proper vacuum is obtained the platform is lowered onto the 100 blanket and pressure applied thereto. This pressure on the platform levels the covers



and forces them to their seats. Air is then admitted, which holds the covers firmly on the cans or jars.

What I claim as my invention is—

5 1. In an apparatus for seating and sealing covers on cans, jars and similar articles, the combination of a retort within which the cans or jars are placed and on which the covers are loosely placed, means for exhausting air  
10 from the retort and cans or jars, and means for admitting air to the retort, a device for retaining the covers on each can or jar while the air is being exhausted therefrom, and means for leveling and seating each cover on  
15 its receptacle, said means comprising a platform, a rod connected to said platform and an eccentric for reciprocating said rod.

2. In an apparatus for seating and sealing covers on cans, jars and similar articles, the  
20 combination of a retort within which the cans or jars are placed and on which the covers are loosely placed, means for exhausting air from the retort and cans or jars, and means for admitting air to the retort, a device for  
25 retaining the covers on each can or jar while the air is being exhausted therefrom, and means for leveling and seating each cover on its receptacle, said means comprising a platform, a rod having a universal connection at  
30 one of its ends with said platform, and an eccentric for reciprocating said rod.

3. In an apparatus for seating and sealing covers on cans, jars and similar articles, the

combination of a retort within which the cans or jars are placed and on which the covers  
35 are loosely placed, means for exhausting air from the retort and cans or jars, and means for admitting air to the retort, a device for retaining the covers on each can or jar while the air is being exhausted therefrom, and  
40 means for leveling and seating each cover on its receptacle, said means comprising a platform, guides for said platform, a rod connected to said platform and an eccentric for reciprocating said rod. 45

4. In an apparatus for seating and sealing covers on cans, jars and similar articles, the combination of a retort within which the cans or jars are placed and on which the covers are loosely placed, means for exhausting air  
50 from the retort and cans or jars, and means for admitting air to the retort, a device for retaining the covers on each can or jar while the air is being exhausted therefrom, and means for leveling and seating each cover on  
55 its receptacle, said means comprising a platform, guides for said platform, a rod having a universal connection with said platform, and an eccentric for reciprocating said rod.

In testimony whereof I have signed my  
60 name to this specification in the presence of two subscribing witnesses.

EVERETT K. LEFFINGWELL.

Witnesses:

GEO. E. CRUSE,  
K. G. LE ARD.