

No. 649,012.

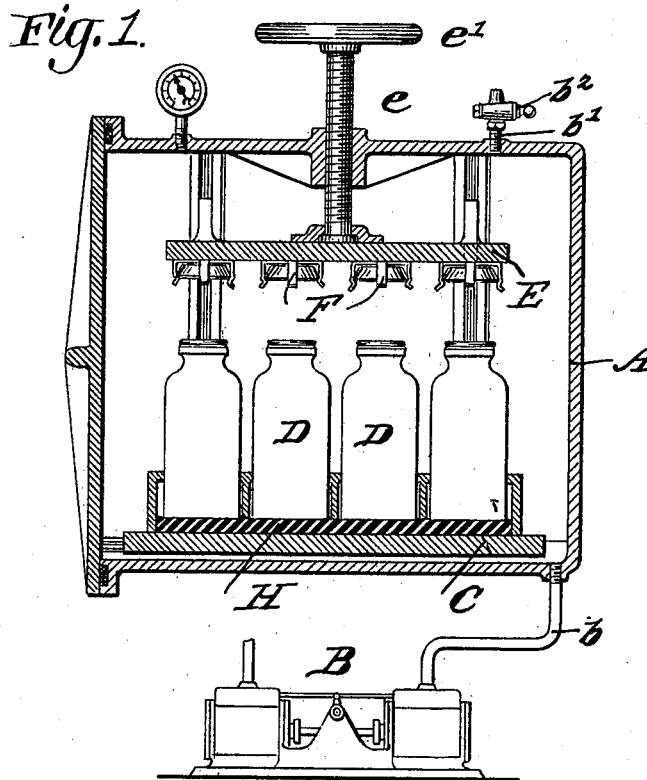
Patented May 8, 1900.

F. L. TAPSCOTT.

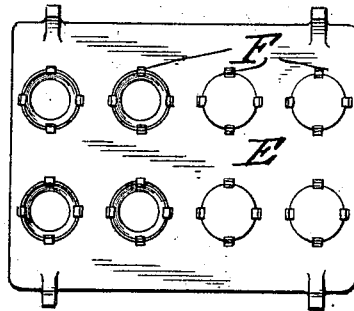
APPARATUS FOR SEATING AND SEALING COVERS OF CANS, JARS, &c.

(Application filed Feb. 3, 1900.)

(No Model.)



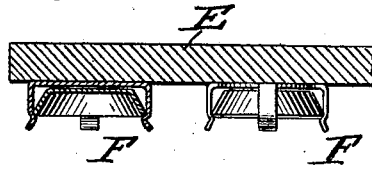
*Fig. 2.*



*Fig. 3.*

WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRANK L. TAPSCOTT, OF NEW YORK, N. Y.

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

SPECIFICATION forming part of Letters Patent No. 649,012, dated May 8, 1900.

Application filed February 3, 1900. Serial No. 3,898. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK L. TAPSCOTT, a citizen of the United States of America, residing in the borough of Brooklyn, city and State of New York, have invented a certain new and useful Improvement in Apparatus for Seating and Sealing the Covers of Cans, Jars, and Similar Receptacles, of which the following is a specification.

My invention relates to apparatus for seating and sealing the covers of cans, jars, and similar articles. I will describe such apparatus embodying my invention and then point out the novel features in the claims.

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 of cans and jars embodying my invention. Fig. 2 is a bottom view of a movable platform embodied in the apparatus shown in Fig. 1. Fig. 3 is a detail view on an enlarged scale.

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

A represents a suitable retort, which is provided with an air-tight door, (not shown,) and B represents a pump connected with the retort by a pipe *b*, by means of which air is exhausted from the retort and from the cans, jars, or other receptacles contained within the retort.

*b'* represents a conduit controlled by a valve *b'* for admitting air into the retort.

C represents a support for cans, jars, &c.,

D. The support may be of any desired form and may be supported within the retort in any desired manner. As here shown, it is in the form of a tray with recesses for separately holding the cans or jars.

E represents a carrier-platform or other device provided within the retort A, which platform is adapted to be moved in a vertical direction relatively to the support C. Any desired means may be employed for moving the platform vertically. The means here shown comprise a screw *e*, having a hand-wheel *e'*. The screw extends through the wall of the retort and a packing may be provided about the opening to render it air-tight. The under surface of the platform E is provided with a number of holders F, in each of which holders a cover for a can, jar, or other receptacle

is adapted to be held. These holders may be either pneumatic, magnetic, or spring. Springs are shown in the drawings as constituting the holders. These springs are of such strength that when the platform carrying the covers is moved onto the jars to place the covers thereon and air admitted into the retort the air so admitted will retain the covers on the jars and cause the covers to be disengaged from the holders. In case pneumatic or magnetic holders are employed any of the well-known forms may be employed. It will be understood that the holders and the recesses within the support C register in order that a proper seating may be had for the covers on the cans or jars held in the recesses of the support.

H represents a resilient device, such as a rubber pad, which is placed beneath each jar. Instead of placing the resilient device beneath each jar it may be placed intermediate each cover-holder and its supporting-board. The purpose of this resilient device is to compensate for any inequalities in the length of the jar. As shown in the drawings, the resilient device H is a continuous pad of rubber which extends over the surface of the support.

The operation of the apparatus will be readily understood. The cans, jars, or other articles on which the covers are to be sealed and seated are placed within the retort, and the covers for the said cans or jars are placed in the holders carried by the platform E. The retort is then sealed and the pump B put in operation to exhaust the air from the retort and from the cans or jars therein. After a proper vacuum has been obtained the platform and the covers carried thereby are lowered onto the cans or jars and seated thereon. The valve controlling the conduit *b'* is then opened to admit air into the retort. The air rushing into the retort forces the covers onto the jars, and thus effectively seals them. The platform is then raised and the cans or jars, with their covers seated and sealed thereon, are removed from the retort.

The above operation may be varied as follows: The covers may be loosely placed on the jars and the platform and holders lowered to take up the covers. The platform is then raised again and the air is exhausted

from the retort and the cans or jars. The covers are then seated and sealed, as before described. This variation in the operation is particularly advantageous where large retorts are used in which a great many jars are to be sealed at one time. The platform may then be mounted on rollers, which travel on tracks leading to and into the retort.

What I claim as my invention is—

10 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, means for exhausting air from said retort and the cans or jars and  
15 means for admitting air to the retort, a carrier within said retort provided with a number of holders for carrying the covers for said cans or jars within the retort, and means for vertically moving said carrier.

20 2. 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, means for exhausting air from said retort and the cans or jars and  
25 means for admitting air to said retort, and a vertically-movable device within said retort carrying a cover for each can or jar.

3. In an apparatus for seating and sealing covers on cans, jars and similar articles, the  
30 combination of a retort within which the cans or jars are placed, means for exhausting air

from said retort and the cans or jars therein and means for admitting air to said retort, a vertically-movable platform within said retort and a plurality of spring-holders carried  
35 by said platform for carrying the covers for said cans or jars.

4. In an apparatus for seating and sealing covers on cans, jars and similar articles, the combination of a retort within which the cans  
40 or jars are placed, means for exhausting air from said retort and the cans or jars therein and means for admitting air thereto, a vertically-movable carrier within said retort carrying the covers for the cans or jars, and a re-  
45 silient device for each can or jar.

5. In an apparatus for seating and sealing covers on cans, jars or similar articles, the combination of a retort within which the cans or jars are placed, a support within said re-  
50 tort on which said cans or jars rest, a resilient device for each can or jar carried by said support, a vertically-movable carrier within said retort and holders provided on said carrier for carrying covers for said cans or jars.  
55

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

FRANK L. TAPSCOTT.

Witnesses:

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DONALD CAMPBELL.