

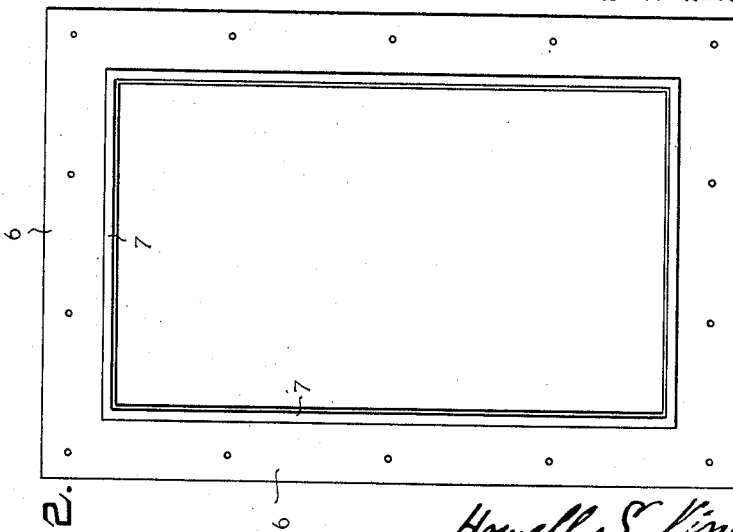
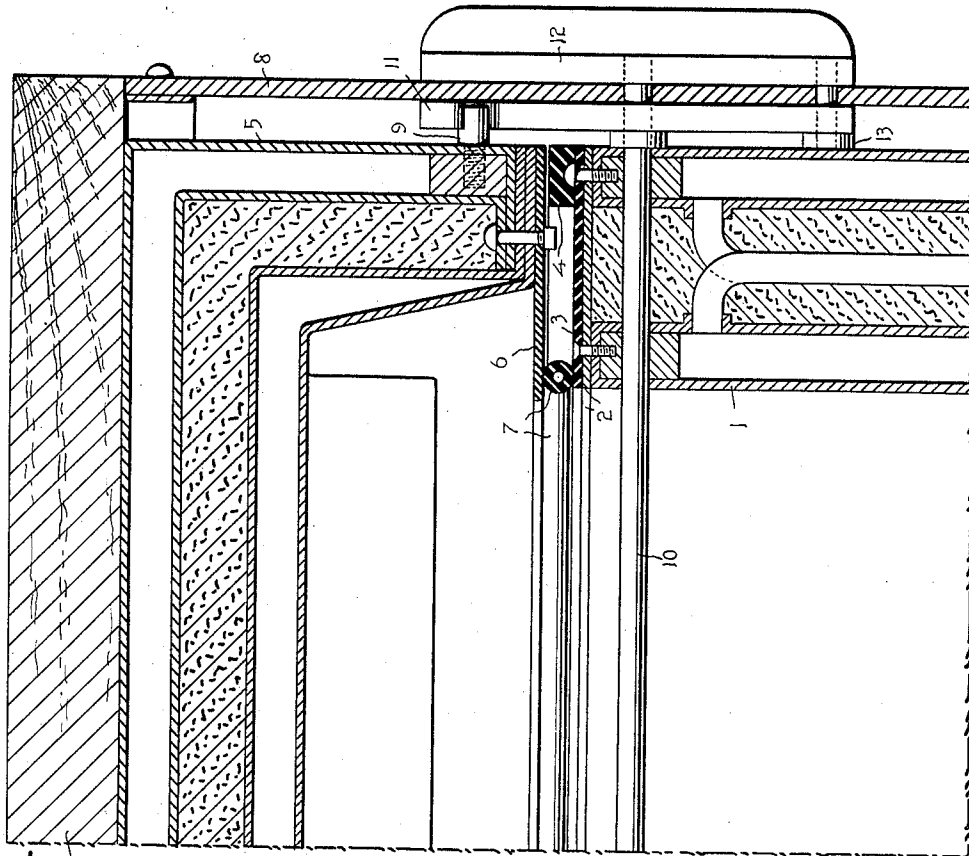
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PRESSURE CHAMBER SEAL

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PRESSURE CHAMBER SEAL

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3 Claims. (Cl. 220—46)

My invention consists in a new and useful improvement in a pressure chamber seal and is designed more particularly to provide a sealing means for the chamber and cover of a pressure cooker. This application is a divisional application from my application Serial Number 422,962, now matured into Patent No. 2,060,434, filed in the United States Patent Office on January 23, 1930, which is a divisional application from my application Serial Number 354,967, filed in the United States Patent Office on April 13, 1929.

The particularly novel and useful features of the invention described and claimed herein are the sealing means applied to the meeting edges of the chamber and cover, in which there is provided a back-pressure lip so designed and disposed as to be automatically operated by the pressure within the closed chamber to effectively seal the joint to prevent loss of pressure.

While I have illustrated in the drawing filed herewith and have hereinafter fully described one specific embodiment of my invention, it is to be distinctly understood that I do not consider my invention limited to said specific embodiment, but refer for its scope to the claims appended hereto.

In the drawing:

Fig. 1 is a vertical section through the upper portion of a pressure chamber and the cover therefor.

Fig. 2 is a bottom plan view of the back pressure lip.

As illustrated in the drawing, the pressure chamber has the insulated wall 1 provided at its top with the circumferential plate 2 on which is mounted a flat rubber gasket 3, on which at its outer edge is mounted a rubber buffer 4.

The vertically movable top 5 for the pressure chamber is provided, on its lower side, with the circumferential flexible back-pressure lip 6 which extends inwardly from the lower edge of the top 5, and carries at its inner edge the cylindrical rubber gasket 7, to co-act with the gasket 3.

Suitably mounted about the pressure chamber is the jacket 8 which projects upwardly above the upper edge of the wall 1 of the chamber, beside the top 5 and fitted under its upper surface 5-a.

Suitably mounted at each corner of the top 5, adjacent its lower edge, there is a pin 9. Suitably journaled in the wall 1 of the chamber are two rock-shafts 10, one of which also passes through the jacket 8. Mounted on each end of each of these shafts 10, on the outside of the wall 1, there is a hook 11 adapted to co-act with one of the pins 9, to lock the cover 5 upon the chamber. The shaft 10 passing through the jacket 8 has on its outer end the operating button 12. The hook 11 adjacent the button 12 has a pitman 13 connecting it with the corresponding hook 11 on the other

shaft 10. Thus, it is obvious that by this construction all of the hooks 11 may be actuated by the button 12.

From the foregoing description of the details of construction of my device, its use and operation will be obvious. When the vertically movable cover 5 has been moved downwardly to close the chamber (as shown in Fig. 1), the hooks 11 are moved by the button 12 to engage the pins 9, thus locking the chamber and its cover in closed position, for application of pressure within the closed chamber. It is to be noted that by reason of the design and disposition of the hooks 11 and pins 9, a certain degree of pressure downwardly is exerted upon the cover 5 by the action of the hooks 11, which causes the cover 5 to press the back-pressure lip 6 and its gasket 7 upon the gasket 3 on the top plate 2 of the wall 1 of the chamber. It is obvious that when pressure is applied within the closed chamber it will cause the flexible back-pressure lip 6 to effectively seal the joint between its gasket 7 and the gasket 3.

Having described my invention, what I claim is:

1. In combination with a pressure chamber having a vertically movable cover, a flexible lip having its inner periphery extending inwardly from the lower edge of said cover and spaced from the upper end of said cover; a cylindrical resilient cushion applied to the lower face of said lip on its inner periphery, and a flat resilient surface on the upper edge of said chamber against which said cushion bears when the cover is applied to the chamber, and pressure is applied to the lip.

2. In combination with a pressure chamber having a vertically movable cover, a flexible peripheral lip so mounted on said cover as to provide a space between the inner surface of the cover and the lip, subject to the variations of pressure in the chamber; a cylindrical resilient cushion applied to the lower inner periphery of said lip, and a flat resilient surface on the upper edge of the chamber against which said cushion bears when the cover has been applied to the chamber, and pressure is exerted on the lip.

3. In combination with a pressure chamber having a cover bodily removable therefrom, a flexible lip having its outer periphery mounted on the lower edge of the cover and its inner periphery spaced from the upper end of said cover and extending over the upper edge of the chamber, a cylindrical resilient cushion applied to the lower face of said lip on its inner periphery, and a flat resilient surface on the upper edge of the chamber against which said cushion bears, when the cover is applied to the chamber, and pressure is exerted on the lip.

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