March 31, 1953 B. F. KELLS 2,633,285

PARTITIONED CONTAINER WITH CLOSURE

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Fig. 1

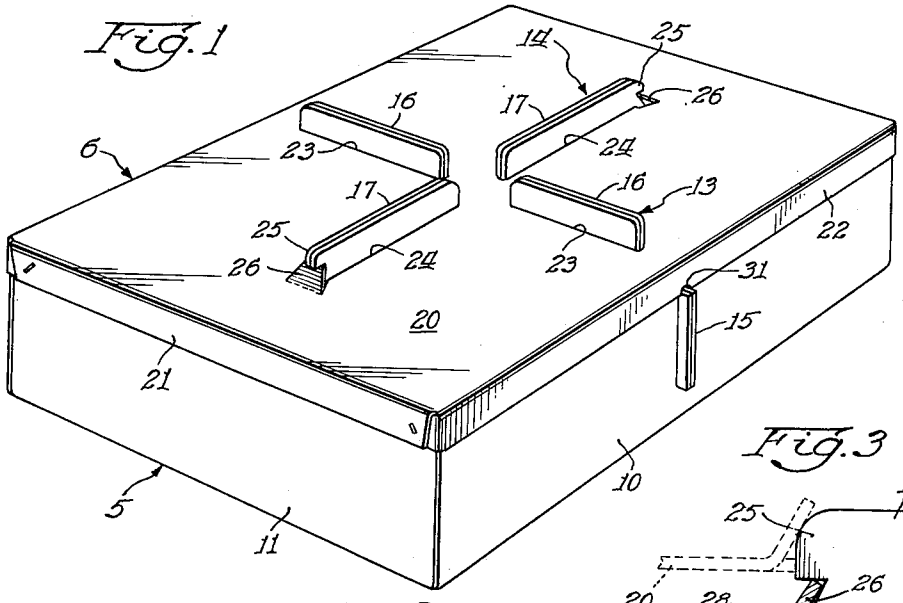
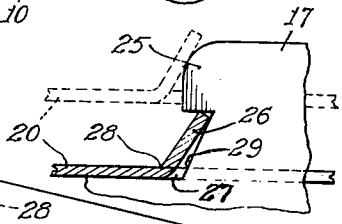



Fig. 3



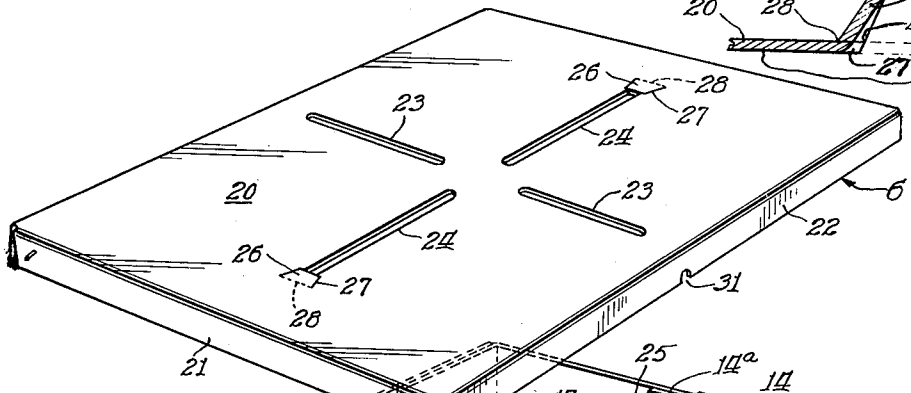
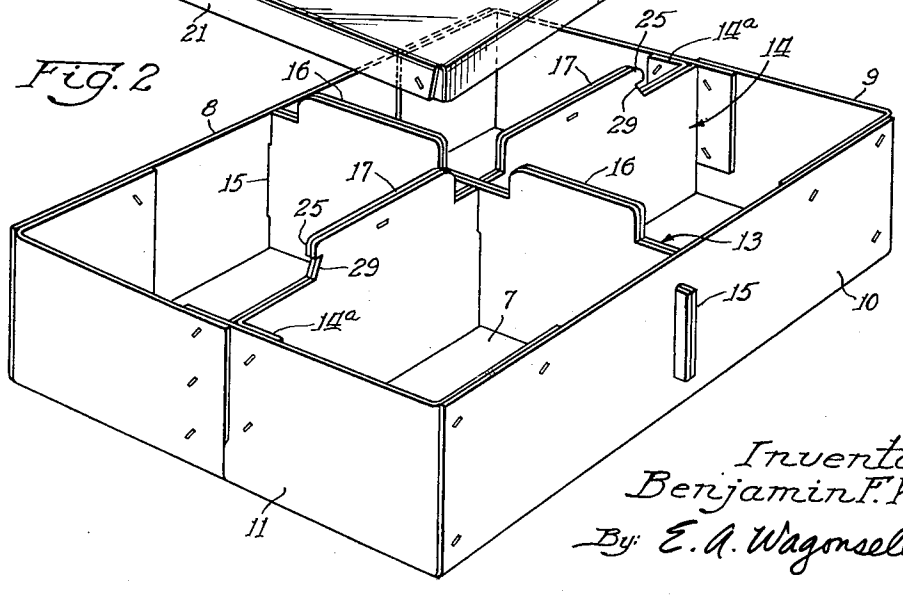




Fig. 2




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## PARTITIONED CONTAINER WITH CLOSURE

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3 Claims. (Cl. 229—15)

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The present invention relates to containers and more particularly to containers formed of paperboard or similar sheet material and having a partition therein and a closure for the container.

In its preferred form the container of the present invention comprises a container formed of corrugated fibreboard having a bottom panel and four side walls, there being partition elements secured within the container, having upstanding parts receivable into slotted openings in the cover. The cover and the upstanding parts on the partition are formed with interengaging members serving as releasable locking means for releasably retaining the cover on the container.

The objects of the invention are to provide a light, strong container, particularly adapted for transportation of baby chickens, having partitions and a releasable cover portion which may be securely locked on the container and at the same time may be unlocked with ease to enable the cover to be removed for inspection of the contents.

Another object is to provide means for spacing containers from each other both laterally and when stacked and to combine with the spacing elements a convenient form of locking means for retention of the cover.

Other objects will be apparent from the following specification and in the claims appended thereto.

In the drawings:

Fig. 1 is a perspective view of a container embodying the present invention showing a closure thereon and illustrating the device for locking the closure in place;

Fig. 2 is a view of the container with the closure in raised position to illustrate the interior construction of the container tray or bottom portion; and

Fig. 3 is an enlarged fragmentary detail view, in elevation, illustrating the closure locking parts.

Referring particularly to Fig. 1 of the drawings the receptacle part of the container is designated as a whole at 5 and the cover at 6. The receptacle part of the container comprises a bottom panel 7 and side walls 8, 9, 10 and 11 suitably connected to the bottom and connected to each other along the upright corners of this part of the container.

Partition members 13 and 14 are secured within the container in any suitable manner. In the present instance each end of partition 13 has a reduced outwardly projecting portion 15 (see Fig. 2) which extends through an opening formed

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in each side wall 8 and 10. The partition 14 is illustrated as being secured to the side walls 9 and 11 by means of a flap 14a stapled to the inner surface of the adjoining wall. The partitions are centrally notched so as to permit them to be interfitted. The extended portions 15 serve to space the side walls 8 and 10 of the containers from similar containers as well as serving to space the containers from the walls of a transporting vehicle to insure good ventilation.

The partitions 13 and 14 are formed with portions 16, 16 and 17, 17, respectively, which extend upwardly above the plane of the side walls. These portions serve as spacing members to separate the container from a superimposed container when it is desired to stack them in a pile.

The cover member 6 is formed with a main panel 20 and side flanges 21 and 22 suitably secured together at their corners. The main panel is formed with elongated openings or slots 23, 23 and 24, 24 to receive the respective extended portions 16, 16 and 17, 17 of the partitions.

The cover part is releasably locked to the receptacle part of the container by a latch and latch keeper arrangement which insures that the cover part may not accidentally be displaced and the construction is such that the placement of the cover part in proper position upon the receptacle part will effect the interengagement of the latch with its keeper. The latch keeper is formed as an integral element or part of the receptacle partition and, to that end, each of the extended portions 17, 17 of partition 14 is V-notched along one of its upwardly extending edges at a place located above the position of the normal plane of those areas of the cover part which lie adjacent thereto when the cover part is put in place. As best seen in Fig. 3, each V-notch is so formed that one leg of the V provides a substantially horizontal downwardly facing edge while the other or opposed leg of the V lies at an acute angle (less than 90°) to the first leg and provides a more or less upwardly and outwardly facing edge 29. The two notches open in opposing directions.

Each V-notch provides a projecting or overhanging shoulder piece 25 which becomes the keeper for the latch which is formed by a tab 26 preferably integral of the panel 20 of the cover part. Since there are two latch keepers there are two tabs 26 one of which is located at the outer end of each of the elongated openings or slots 24, each tab being defined by a narrow terminal edge coincident with the end of the adjacent slot 24 and extending transversely of the slot length and a pair of spaced slits 27 which

run divergingly from the terminal edge of the tab for predetermined like distances to a tab hinge line 28. Hinge line 28 may be determined by impression (pre-creasing) such line, as shown, the line extending substantially parallel to the terminal edge of the tab. When the cover part is being put in place the upwardly projecting portion 17 of partition 14 will be projected through the elongated slits 24 with which they are arranged to be in register and by reason of the construction, to be more fully described hereinafter, each of the tabs 26 will be engaged by the upper edge of the shoulder piece 25 and caused to swing upwardly about its hinge line 28 to a position where its plane is disposed substantially vertical to the plane of adjacent areas of the cover part and to remain in such position until the free terminal edge of such tab clears the outer end edge of the adjacent shoulder piece 25 and drops into the underlying notch.

It is to be noted that the openings 24 include the space left when the tabs 26 are raised. These openings are of such length that the upwardly extending portions 17, 17 on the partition will be more or less snugly received into the openings. Due to this construction, when the cover is moved toward closing position the tabs 26 will be forced to swing upwardly and the outer edge of each tab will ride over the edge of the laterally projecting or overhanging part 25. When the cover has been brought into its final position the end of tab 26 will have passed the part 25 and will tend to move toward its original position due to the resilience of the paperboard. The end of the tab will thus move to a position against the underside of the part 25, thus retaining the closure in locked condition on the receptacle part of the container.

The upwardly extending portion 17 is preferably cut along a downwardly and outwardly inclined line to provide an inclined edge 29, the lower extremity of which will be disposed approximately at the hinge line 28 when the cover is in fully closed position. The tab 26 will thus rest for a portion of its length against this inclined edge with the outer edge of the tab engaged at the juncture of the inclined edge and the lower surface of the laterally projecting part 25.

If the side flanges 22 are sufficiently wide as to contact the extended portion 15, a notch 31 may be formed in each flange 22 to accommodate the portion 15.

In the use of the container it will be loaded with the desired contents, such as day-old baby chicks, after which the cover is placed on the container so that the upwardly projecting portions on the partitions are received into the openings 23 and 24. When the cover reaches a point where it will rest upon the upper edges of the side walls the tabs 26 will have slipped past the parts 25 and will snap into place beneath the lower edges of such parts 25 and a portion each tab will rest against the inclined edges 29.

When it is desired to open the container for inspection or removal of contents it is only necessary to swing both of the tabs 26 outwardly to clear the parts 25, and at the same time lift the cover. After inspection of contents the cover may again be placed on the container and the tabs 26 will automatically snap or, if necessary, may be pushed back into closing and latching position.

From the foregoing it is apparent that there is provided a very simple and convenient arrangement for releasably locking a closure on a partitioned container. The construction is economical and simple to manufacture. Due to the construction of the latching tab as an integral part of the cover panel a resilience of action is assured which will cause the cover to be held securely on the container until such time that it is desired to open the container.



While the present description sets forth a preferred embodiment of the invention, certain changes may be made in the construction without departing from the spirit of the invention, and it is therefore desired that the present embodiment be considered in all respects as illustrative and not restrictive reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

I claim:

1. In a paperboard container for baby chicks and the like wherein there is a receptacle part and a cover part, the receptacle part having a bottom surrounding side walls and a substantially vertical partition disposed centrally of the container and means for retaining the partition in relatively fixed relation within the receptacle part, the partition having a portion extending upwardly above the plane of the upper edges of the side walls, such portion having an upwardly inclined edge and a downwardly facing edge overhanging and intersecting the upwardly inclined edge thereby to provide a latching shoulder, a substantially flat cover panel for the container formed with an elongated opening for passage therethrough of said upwardly extending portion, the cover panel having spaced slits extending from one end of the said elongated opening to provide a latching tab therebetween, said tab having a free edge facing toward the opposite end of said opening, the horizontal length of the opening being substantially less than the combined correspondingly measured dimensions of the upwardly extending portion including the latching shoulder so that when the cover is placed in closed position on the container the upwardly extending portion will project through the opening in the cover and will engage and displace the hinged latching tab and cause it to swing out of the plane of the cover panel while the latter is moving to final position on the container and so that after the end of the latching tab has passed over the latching shoulder the tab may swing downwardly so that its said free edge will engage beneath the said downwardly facing edge thereby to retain the cover panel releasably locked upon the container.

2. A cover lock composed of keeper and latch members for a covered container of the compartment type wherein there are a receptacle part and a cover part, the receptacle part including side walls, a bottom wall and a substantially vertical partition wall effecting division of the receptacle part into a plurality of compartments, said partition wall having a pair of spaced and aligned portions projecting upwardly above the plane of adjacent portions of the cover part when the latter is in place, the cover part having aligned elongated slots so disposed as to receive said upwardly projecting partition portions, the lock keeper member being formed by a V-shaped notch in each of said upwardly projecting portions of the partition wall, said notches opening in substantially opposite directions with one leg defining each V-notch formed by a substantially horizontal edge facing downwardly and the other leg formed by an edge extending down-

wardly at an angle less than a right angle to the said horizontal edge whereby to provide an inclined edge facing generally toward said horizontal edge, the lock latch member comprising a tab integral with the cover adjacent to that end of each slot which is disposed adjacent to a V-notch, each tab, when the cover part is assembled on the container part, having an edge portion extending transversely of the adjacent slot and projecting into the adjacent notch and underlying the horizontal edge of such notch, each tab being tilted upwardly out of the plane of adjacent areas of the cover by contact with the inclined edge of the notch into which it projects.

3. A paperboard container including a receptacle part and a cover part, said receptacle part including a bottom wall with surrounding upstanding side walls and an upstanding partition secured relative to and between said side walls, said cover part having an elongated slot, a tab integral with said cover part along a hinge axis spaced from one end of said slot and extending transversely of the length thereof, said tab having a terminal edge substantially parallel to said hinge axis and in part coincident with said slot end, the opposite side edges of said tab being delineated by spaced slits extending from said terminal edge to said hinge axis, said partition having a portion extending upwardly through said slot, said upward extending portion having an end edge extending upwardly adjacent to said tab and having a notch in its said edge adjacent to said tab and above the plane of the cover part adjacent to said tab, said notch being defined by a relatively horizontal downwardly facing upper edge and a lower edge inclined upwardly and away from said slot end to a junction with said upper edge, said tab being inclined upwardly about its hinge axis and disposed in said notch with its said terminal edge substantially at the junction between the upper and lower edges of the notch.



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