

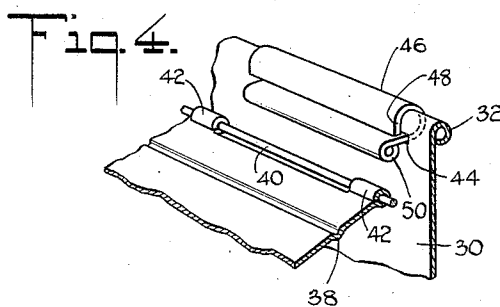
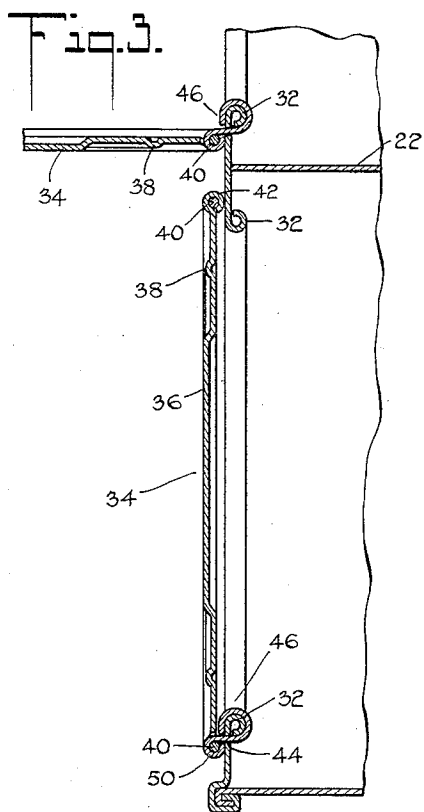
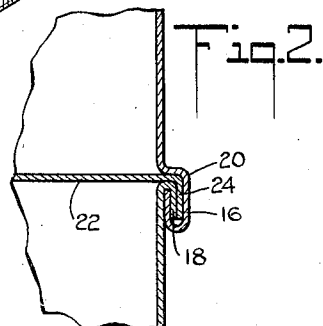
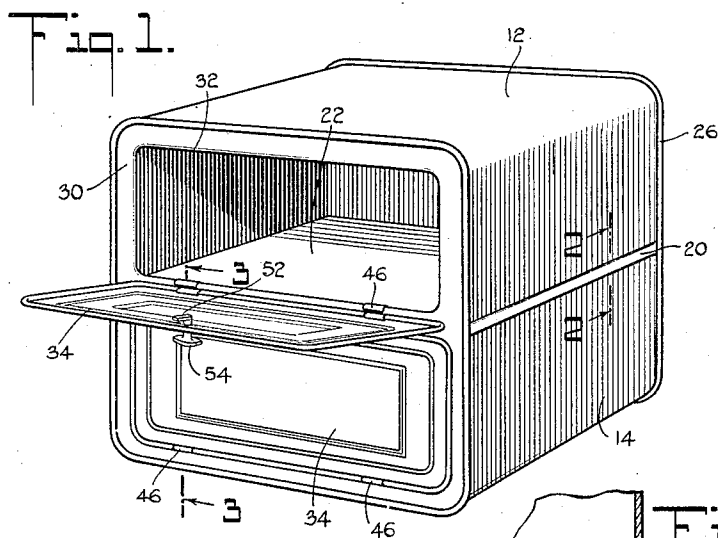
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SHEET METAL CONTAINER

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SHEET METAL CONTAINER

Application filed January 27, 1931. Serial No. 511,479.

This invention relates to sheet metal containers, and more particularly to such a container arranged for use as a bread and cake box.

5 It frequently is desirable to provide a sheet metal container with a partition, or, if the container is arranged horizontally, with a shelf. To mount and support such a partition or shelf in place by means of soldering, is expensive, while the use of riveting is both
10 expensive and unsightly. One primary object of the present invention resides in the provision of a metal container having a shelf or partition integrally formed therewith, without necessitating the use of solder or
15 rivets. This object is fulfilled generally, by forming the container out of a plurality of sheets of metal the edges of which are joined by seams, and providing a partition or shelf
20 within the container, the ends of which are held within the seams, preferably by bending and rolling the same when the seams are rolled to form the sides of the container. The resulting construction strengthens the container and in no way mars the appearance
25 thereof.

In another aspect the present invention relates to a hinged door or cover for a metal container such as has so far been described.
30 It is desirable that the inner edge of the door opening be curled to present a smooth and continuous surface so that there will be no danger of cutting the hand of the user of the container. For the same reason it is also desirable that the exposed edge of the door be
35 rounded and continuous. Furthermore, the door should be sufficiently rigid to maintain its shape in use; the door should preferably be so hinged to the open side of the container that it will close flat against the same entirely
40 around the periphery of the door; and, finally, it is desirable that the door be mounted on the container without the use of soldering or riveting.

45 Accordingly, further objects of the present invention are to fulfil the foregoing desiderata, and with these objects in view I have devised a construction in which the inner edge of the door opening is curled inwardly, while the outer edge of the door it-

self is bent around a relatively stiff wire insert preferably extending entirely around the periphery of the door. The open side of the container is provided with a plurality of slots each located just outside of a curled edge
55 of the door opening, and the adjacent edge of the door is cut away at the wire insert at points mating with the aforesaid slot. S-shaped hinge clips are employed, one bend of the clips being inserted through the slots
60 and shaped into locked relation with the curled edge of the door opening, while the other bend of the clips extends around the wire inserts. These hinge clips permit mounting of the door on the container, without the use of soldering or riveting, and at
65 the same time provide a hinge axis which is coincident with the wire insert and which is sufficiently spaced from the face of the open side of the container to permit the door to
70 close flat against said side.

A specific object of the present invention resides in the provision of a new and improved bread and cake box which will have a plurality of compartments separated by
75 shelves on which the bread or cake may be placed and to which access is obtained, preferably by the use of separate doors, the said shelving and doors embodying several advantageous features previously outlined.
80

To the accomplishment of the foregoing and such other objects as will hereinafter appear, my invention consists in the elements of the metal container and their relation one to the other as hereinafter are more particularly
85 described in the specification and sought to be defined in the claims. The specification is accompanied by a drawing in which:

Fig. 1 is a perspective view of a double door bread and cake box embodying features
90 of my invention;

Fig. 2 is a detail section taken in the plane of the line 2—2 in Fig. 1;

Fig. 3 is a partial section in elevation, taken in the plane of the line 3—3 in Fig. 1; and
95

Fig. 4 is a detail explanatory of one feature of the invention.

Referring to the drawing, the sheet metal container is preferably formed of two U-shaped sheets of metal 12 and 14, the open ad-
100

jacent edges 16 and 18 of which are joined by seams generally designated 20. Only one such seam is visible in Fig. 1, the other seam being similar to that shown and lying in a corresponding position along the opposite face of the container. It will be evident that the U-shaped sheets of metal 12 and 14 form the four contiguous sides of the container.

The container is provided with a shelf or partition 22. This member is attached to and supported within the container in an exceedingly simple manner which is almost self-evident from an inspection of the enlarged detail section shown in Fig. 2. The ends 24 of shelf 22 are held within the seams 20 and are supported thereby without the use of soldering or riveting in any form. The ends 24 of shelf 22 are preferably bent downwardly and are rolled within the seam at the time the seam is itself first rolled to close the same. The resulting construction is rigid, strong, and in no way mars the smooth interior of the container and the external appearance thereof.

The ends of the container are closed by end walls 26 and 30 which may be flanged and seamed to the container in any conventional manner. The wall or side 30 has door openings cut therein giving access to the compartments within the container.

To prevent injury to the hand of the user of the container, the edges of the door openings in wall 30 are curled inwardly to form the protective and strengthening bead 32, best shown in Figs. 3 and 4. The container is provided with doors 34 which may, if desired, be stamped to form either or both the panels 36 or the channels 38 which strengthen and improve the appearance thereof. Each door is further strengthened by the use of a relatively stiff wire insert 40 which extends entirely around the peripheral edge of the door, and around which the sheet metal edge 42 of the door is curled or bent. This gives the door a smooth and rounded exposed edge which further improves the appearance thereof.

A plurality of slots 44 are cut through the wall 30 just outside of one of the curled edges 32 of each of the door openings. The sheet metal edge 42 of each of the doors is cut away at the wire insert at points mating with the slots 42. This construction is most clearly shown in Fig. 4 of the drawing. S-shaped hinge clips 46 are then provided, and one bend 48 of the clips is passed through slot 44 and pressed into close contact with the curled edge 32 so as to lock the hinge clip 46 accurately in place. The other bend 50 of the hinge clip is passed around the wire insert 40 and acts as a hinge bearing for the door. The bend 50 accurately fills the space left by the discontinuity in the rounded edge 42 of the door, so that the appearance of the container is in no way marred. At the same

time, the axis of oscillation of the door, which coincides with the wire insert 40, is spaced slightly from the face of the end wall 30, this spacing being substantially equivalent to the dimension of the rounded edge of the door. The door, therefore, closes flat against the end wall 30 of the container, so that the latter presents an accurately finished appearance.

Each of the doors may, if desired, be provided with any appropriate form of lock 52 and knob or handle 54 for controlling the same.

It will be appreciated that by slight variation of the construction of the container, several partitions or shelves may be provided, instead of the single partition or shelf here shown. It will further be appreciated that in such case an equivalent number of doors may be provided in order to give independent access to the compartments. On the other hand, even the present container may be equipped with only a single door giving access to both compartments, and, of course, the same applies to a container having more than two compartments. It will also be appreciated that the invention insofar as it applies to the provision of a partition within a metal container may be used with a vertical as well as a horizontal partition, and that such a vertical partition may, if desired, extend diametrically across a cylindrical container, or diagonally across a square container, and other modifications as the circumstances of any particular case may dictate.

It is believed that the mode of constructing my improved metal container, and the many advantages thereof, will be apparent from the foregoing detailed description thereof. The invention makes it possible to provide a partition or shelf within a metal container, without the use of soldering or riveting, and without in any way marring the finished appearance of the container. The support of the partition strengthens and rigidifies the container and at the same time adds to the cost of the container practically only the cost of the partition itself. The container may be provided with a door which is hinged to the container by mechanism of extreme simplicity and economy and which also requires no soldering or riveting.

It will be apparent that while I have shown and described my invention in the preferred form, many changes and modifications may be made in the structure disclosed without departing from the spirit of the invention, defined in the following claims.

I claim:

1. A container comprising a plurality of sheets of metal having longitudinal and transverse edges, the longitudinal edges of the sheets being joined in edge to edge relation by longitudinal seams to form the closed continuous sides of the container, a longi-

itudinal partition in said container the side or longitudinal edges of which are held within said longitudinal seams, said partition forming two compartments extending longitudinally in side by side relation, and end walls for said container, one of said end walls closing the two compartments at one end of the container, and the other of said end walls being arranged to provide access to the two compartments at the other end of the container.

2. A bread and cake box comprising two U-shaped sheets of metal, the open edges of which are joined by rolled side seams to form the four contiguous sides of the box, a partition or shelf in said box extending across the same from one to the other of said side seams, the ends of said partition or shelf being bent and rolled within said rolled side seams so that the latter serve as supports for the shelf, said partition dividing the box into two compartments, and end walls for said box, one of said end walls closing the two compartments at one end of the box, and the other end wall being arranged to provide access to the two compartments at the other end of the box.

3. A box one side of which is cut open to form a door opening, a slot cut through said side just outside of one of the edges of the opening, a sheet metal door for closing said opening, a wire insert at an edge of said door, the edge of the door being rolled around the wire insert and being cut away at a point mating with the aforesaid slot, and an S-shaped hinge clip one bend of which is inserted through the slot and bent into locked relation with the edge of the opening and the other bend of which extends around the wire insert.

4. A box one side of which is cut open to form a door opening, a plurality of slots cut through said side just outside of one of the edges of said opening, a sheet metal door for closing said opening, a wire insert extending around the periphery of said door, the edges of the sheet metal of the door being rolled around the wire insert, one of said edges being cut away at the wire insert at points mating with the aforesaid slots, and S-shaped hinge clips one bend of which is inserted through the slots and bent into locked relation with the edge of the opening and the other bend of which extends around the wire insert, the hinge clips permitting the door to close flat against the surface of the open side.

5. A sheet metal bread and cake box, one side of which is cut open to form a door opening, the sheet metal of said side being curled inwardly at said opening in order to present a smooth and finished exposed edge, a pair of slots cut through said side just outside of one of said curled edges, a sheet metal door for closing said opening, a wire insert extending around the periphery of said door,

the edges of the sheet metal of the door being rolled around the wire insert, one of said edges being cut away at the wire insert at points mating with the aforesaid slots, and S-shaped hinge clips one bend of which is inserted through the slots and bent into locked relation with the curled edge of the open side of the box and the other bend of which extends around the wire insert, the hinge clips permitting the door to close flat against the surface of the open side.

6. A sheet metal box comprising sheets of metal the open edges of which are joined by a rolled side seam to form the sides of the box, a partition or shelf in said box extending across the same from one to another of said side seams, the ends of said partition or shelf being bent and rolled within said side seams so that the latter serve as supports for the shelf, a pair of end walls closing the opposite ends of the box, one of said end walls being cut away to form a door opening giving access to slots cut through said side just outside of one of the edges of said opening, a sheet metal door for closing said opening, a wire insert extending around the periphery of said door, the edges of the sheet metal of the door being rolled around the wire insert, one of said edges being cut away at the wire insert at points mating with the aforesaid slots, and S-shaped hinge clips one bend of which is inserted through the slots and bent into locked relation with the edge of the open side of the box, and the other bend of which extends around the wire insert.

7. A sheet metal box comprising two U-shaped sheets of metal, the open edges of which are joined by a rolled side seam to form the four contiguous sides of the box, a partition or shelf in said box extending across the same from one to the other of said side seams, the ends of said partition or shelf being bent and rolled within said side seams so that the latter serve as supports for the shelf, a pair of end walls closing the opposite ends of the box, one of said end walls being cut away to form a door opening giving access to the box, the sheet metal of said side being curled inwardly at said opening in order to present a smooth and finished exposed edge, a plurality of slots cut through said side just outside of one of said curled edges of said opening, a sheet metal door for closing said opening, a wire insert extending around the periphery of said door, the edges of the sheet metal of the door being rolled around the wire insert, one of said edges being cut away at the wire insert at points mating with the aforesaid slots, and S-shaped hinge clips one bend of which is inserted through the slots and bent into locked relation with the curled edges of the open side of the box, and the other bend of which extends around the wire insert, the hinge clips permitting the door

to close flat against the surface of the open side.

8. A double door sheet metal box comprising sheets of metal the open edges of which are joined by a rolled side seam to form the sides of the box, a partition or shelf in said box extending across the same from one to another of said side seams, the ends of said partition or shelf being bent and rolled within said side seams so that the latter serve as supports for the shelf, a pair of end walls closing the opposite ends of the box, one of said end walls being cut away to form two door openings giving access to the compartments within the box, slots cut through said side just outside of one of the edges of each of said openings, a pair of sheet metal doors for closing said openings, each of said doors having a wire insert extending around the periphery thereof, the edges of the sheet metal of the doors being rolled around the wire inserts, one of said edges being cut away at the wire insert at points mating with the aforesaid slots, and S-shaped hinge clips one bend of which is inserted through the slots and bent into locked relation with the edges of the open side of the box, and the other bend of which extends around the wire inserts, the hinge clips permitting the covers to close flat against the surface of the open side.

9. A double door sheet metal bread and cake box comprising two U-shaped sheets of metal, the open edges of which are joined by a rolled side seam to form the four contiguous sides of the box, a partition or shelf in said box extending across the same from one to the other of said side seams, the ends of said partition or shelf being bent and rolled within said side seams so that the latter serve as supports for the shelf, a pair of end walls closing the opposite ends of the box, one of said end walls being cut away to form two door openings giving access to the compartments within the box, the sheet metal of said side being curled inwardly at said openings in order to present a smooth and finished exposed edge, a pair of slots cut through said side just outside of one of said curled edges of each of said openings, a pair of sheet metal doors for closing said openings, each of said doors having a wire insert extending around the periphery thereof, the edges of the sheet metal of the doors being rolled around the wire inserts, one of said edges of each door being cut away at the wire insert at points mating with the aforesaid slots, and S-shaped hinge clips one bend of which is inserted through the slots and bent into locked relation with the curled edges of the open side of the box, and the other bend of which extends around the wire inserts, the hinge clips permitting the doors to close flat against the surface of the open side.

10. A box, one side of which is cut

open to form a door opening, a slot cut through said side just outside of one of the edges of the opening, a door for closing said opening, a hinge pintle formed at the edge of said door at a point mating with the aforesaid slot, and an S-shaped hinge clip one bend of which is inserted through the slot and bent into locked relation with the edge of the opening, and the other bend of which extends around the hinge pintle.

11. A box, one side of which is cut open to form a door opening, a slot cut through said side just outside of one of the edges of the opening, a sheet metal door for closing said opening, a wire insert at an edge of said door, the edge of the door being rolled around the wire insert and being cut away at a point mating with the aforesaid slot, and a hinge clip inserted through the slot and bent around the edge of the opening and also extending around the wire insert in order to act as a hinge bearing for the door.

Signed at New York, in the county of Kings and State of New York this 22 day of January, A. D. 1931.

ARTHUR G. HOPKINS.