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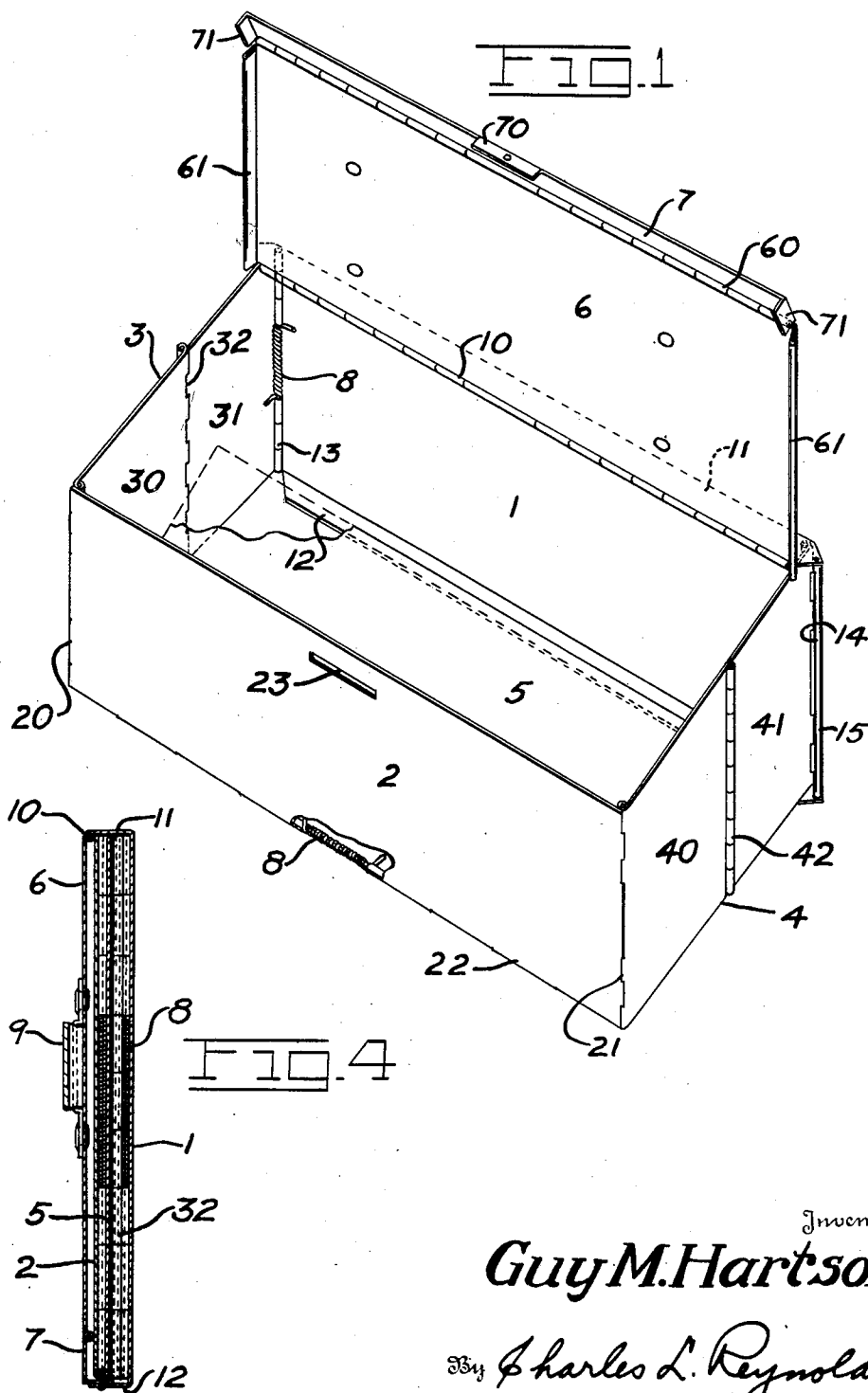
G. M. HARTSON

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FOLDING CONTAINER

Filed March 27, 1933

2 Sheets-Sheet 1



Inventor
Guy M. Hartson

By *Charles L. Reynolds*
Attorney

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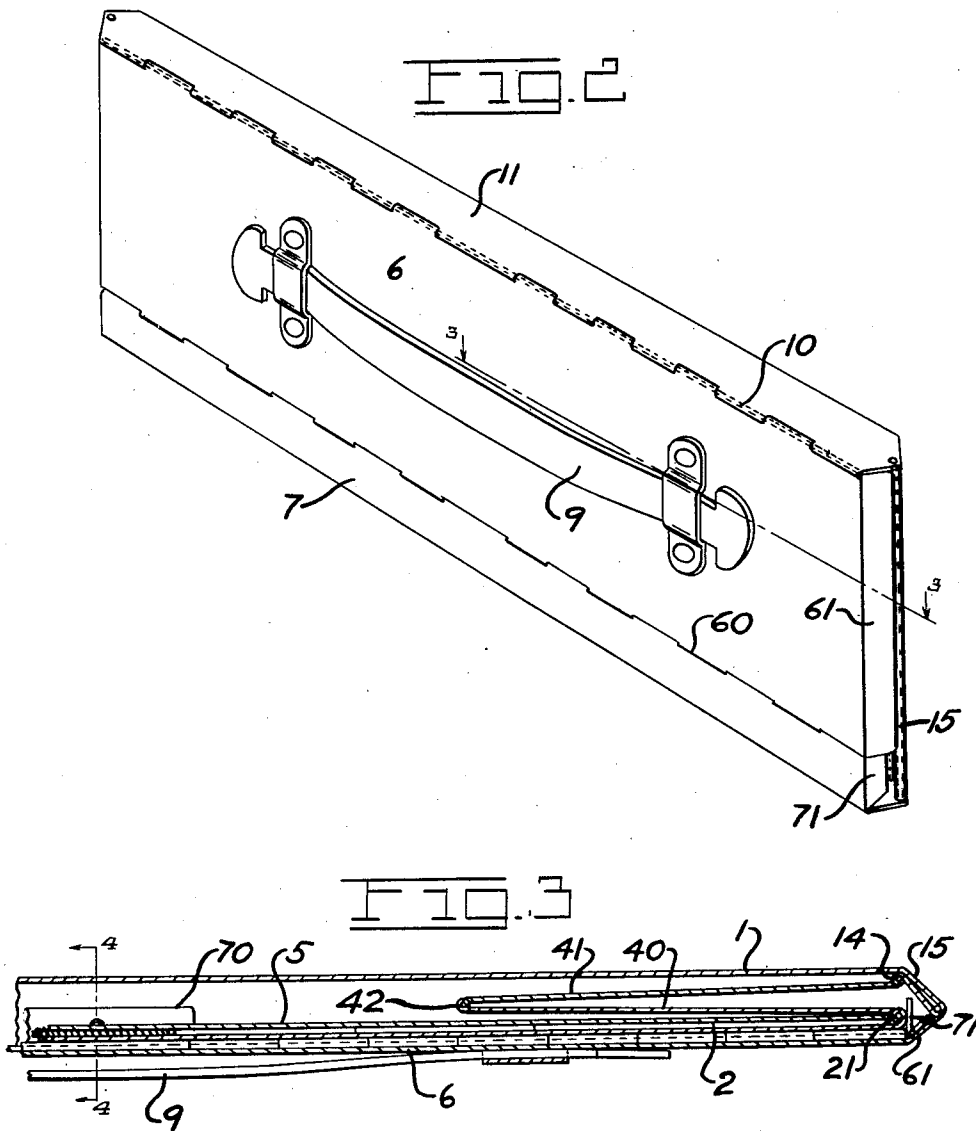
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By **Charles L. Reynolds**
Attorney

UNITED STATES PATENT OFFICE

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FOLDING CONTAINER

Guy M. Hartson, Seattle, Wash.

Application March 27, 1933, Serial No. 662,935

8 Claims. (Cl. 220—6)

This invention relates to folding containers in general, and more particularly to such containers as lunch boxes, automobile trunks, creel baskets, camera cases, and the like.

5 The principal object of my invention is to provide a container which may be folded into a flat, compact package in which the interfolded sides will be concealed from view, so that when folded the package may simulate a woman's purse or the
10 like, when used in the smaller sizes, but which will be of neat appearance for any size of container.

A person may feel hesitant to carry home a lunch box in the evening after its usefulness is
15 over for the day. Many women would consider favorably carrying a lunch to work in the morning if in the evening she could be freed of the conspicuous feeling attached to carrying a lunch box home. It is, therefore, an object to provide
20 a container which will fold neatly into a package which might fit into a purse or which could be made as part of a purse and which, when folded, will appear merely as another compartment thereof.

25 Another object of my invention is to provide such a container which may be folded readily, and unfolded without difficulty, and preferably by the aid of opening springs.

It is a further object of my invention to provide
30 such a container which is of simple construction, and one which may be securely fastened when either open or folded, and preferably by the same catch.

Other objects of my invention, and more particularly those which pertain to my preferred
35 construction, will be apparent from a study of the specification, with reference to the drawings, and from the claims terminating the specification.

Figure 1 is a perspective of my invention, in the
40 open position, parts of which have been broken away.

Figure 2 is a perspective view of my container when folded.

Figure 3 is a longitudinal section of my invention
45 along the line 3—3 of Figure 2.

Figure 4 is a lateral section of my container when folded, taken along the line 4—4 of Figure 3.

In the form shown my container may be a
50 lunch box or similar article. Means are provided to cover the top and bottom edges of the interfolded walls, hereafter described, when the container is folded, and for this purpose I provide flanges projecting from certain walls of the
55 container. The upper flange is formed on the

rear wall, while the lower flange may be formed on either the front or rear wall as desired. In the form illustrated in Figure 1 the rear wall 1 of the container is shown as having flanges 11 and 12 at its top and bottom, respectively, extending forward towards the front wall 2. Joining these front and rear walls at each end are the ends walls 3 and 4, each of which is medially divided into two sections, shown as 30, 31 and 40, 41. These end walls are hinged to the front wall at the hinges 20 and 21, respectively. The composite sections 30 and 31 of the end wall 3 are hinged together at 32, and the sections 40 and 41 of end wall 4 are hinged together in the center by a hinge 42. The end walls 3 and 4 are also
70 hinged to the rear wall 1 by hinges 13 and 14.

The bottom 5 of the container is hinged to the front wall 2 along its lower edge at 22. When in the open position the rearward edge of the bottom is supported upon the lower rear-wall flange 12. If a flange were formed along the lower edge of the front wall 2 instead of the rear wall, the bottom would necessarily hinge on the rear wall. The top 6 is hinged along the forward edge of the flange 11 at 10. This cover also has a flap 7
80 hingedly supported at 60 along its forward edge. This flap extends downward over the front wall 2 when the cover is lowered, and the catch 70 may be engaged in the slot 23 to keep the cover closed.

The method of folding the container when it is not to be used as a container may be shown with reference to Figure 1. First the bottom 5 is swung upwardly about its hinge to lie against the inner side of the front wall 2. Next the central hinges 32 and 42 in the end walls may be pushed inwardly, which will draw the front wall towards the rear wall 1, and upon continued movement these two walls will lie adjacent, the wall 2 being behind the forward edges of the flanges 11 and 12 formed on the rear wall 1. The cover 6 may then be swung downward about the hinge 10 over the front wall into the position shown in Figure 2. The flap 7 may also be swung down as an extension of the cover to engage the lower flange 12.
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For this operation it will be noted that the flanges 11 and 12 are preferably of the same width, and that the combined width of the cover 6 and the flange 7 is substantially equal to the width of the rear wall 1. The container may be readily unfolded in the reverse order. Various springs 8 may be used in connection with the vertical corner hinges and the bottom hinge to assist in reopening the container.

Extensions 15, inclined forwardly, may be 110

formed on the rear wall 1, and complemental extensions 61 may be formed on the top 6, which are inclined downwardly when the container is in the open position, and rearwardly when the container is in the closed position as shown in Figure 2, with the cover extending down over the front wall. When the container is closed, as shown in Figures 2 and 3, these extensions 61 and 15 meet along a line to cover the ends of the interfolded walls, thus to present a neat appearing exterior for the container in closed position. The corners 71 of the flap 7 may be right-angled to leave a means for grasping the flap in opening the container, as shown in Figure 2.

As will be seen in Figure 4, the ends, front and bottom all fold very compactly, so that the container occupies the smallest volume possible in the closed position. Furthermore, the edges of the interfolded walls are completely covered by the rear wall flanges 11 and 12, and the ends by the extensions formed on the rear wall and the cover, to form a neat package, not in the least suggestive of a voluminous container.

It is preferred that the hinges 32 be formed so that, when the container is opened, they will stop further outward movement thereof past the plane position of the end walls. Thus, there is no danger of bending or deforming the parts in either opening the container or in attempting to fold it in an improper manner. A handle 9 will allow it to be carried easily. My container is made very simple to operate, and combines a neat appearance, in both open and closed positions, with a container of ample volume which may be folded into a package of comparatively small dimensions. It will be understood that while my container is shown undecorated, various designs might be engraved thereon to improve its appearance, or a covering of cloth or leather might be employed which would obscure the hinges, particularly the end hinges 42, or the container could be incorporated in a lady's purse.

What I claim as my invention is:

1. A folding container comprising a rear wall having forwardly projecting upper and lower flanges and forwardly inclined end extensions each rigid with the rear wall, a bottom and front and side walls adapted to interfold and fit behind the forward edges of the upper and lower rear-wall flanges and within the outer ends of the end extensions, and a cover hinged at the forward edge of the upper rear-wall flange and adapted to swing downward over the interfolded walls, said cover, when thus disposed, having rearwardly inclined extensions complemental to said rear-wall extensions and adapted to meet the same, thus to enclose the ends of said interfolded walls.

2. The combination of claim 1, and a flap hinged on said cover and having means, when the parts are in the folded position, to engage the lower rear-wall flange thus to maintain the parts in folded relation.

3. A folding container comprising a rear wall having forwardly extending flanges rigid therewith at top and bottom, a front wall, a bottom supported at its rear edge on the lower rear-wall flange when the container is in open position and hinged supported at its front edge upon said front wall and adapted to fold upward thereagainst in folding said container, medially hinged end walls hingedly connected to said front and rear walls and adapted to fold inwardly, thus to bring said front wall adjacent said rear wall, a

cover hingedly supported on the upper rear-wall flange, a flap hinged at the forward edge of said cover and extending down on said front wall, a catch at the lower edge of said flap, means in said front wall engageable therewith, the combined width of said cover and said flap being substantially equal to the width of said rear wall, and said flanges being of a width to extend forwardly of said front wall when the parts are in the folded position, whereby said cover and said flap may extend down over said front wall, and means to engage said catch to maintain the parts in the folded position.

4. The combination of claim 3, the rear wall having forwardly inclined extensions rigid therewith at each end, outwardly of the hinges supporting the end walls, and the cover having complemental downwardly inclined extensions rigid therewith, whereby when the parts are in the folded position the cover and rear wall extensions will meet at each end to enclose the ends of the folded parts.

5. The combination of claim 3, and spring means associated with the hingedly connected walls and bottom tending to maintain the parts in unfolded relation when the container is open and tending to unfold the parts when the container is folded.

6. A folding container comprising a rear wall having one forwardly projecting flange rigid therewith along its upper edge, and another along its lower edge, a bottom and front and side walls adapted to interfold and fit behind and between the forward edge of the flanges, a cover hinged at the forward edge of the upper flange and adapted to swing downward over the interfolded walls, and means engageable to maintain the parts in folded relation.

7. A folding container comprising front and back walls, divided and hingedly connected complemental side wall sections hingedly secured to the front and back walls, respectively, to interfold therebetween, a bottom, a top, and a flap hingedly mounted at the swinging edge of the top, the top being of a width substantially equal to the height of the front, rear, and side walls, but less than the length of the side walls, a flange on the forward edge of which is hingedly mounted the top, said flange being rigid with and projecting forwardly from the upper edge of the back wall, and of a width equal to the difference between the length of the side walls and the width of the top, whereby the flap, when the container is set up, will fold down over the upper edge of the front wall, and whereby the top will overlie the interfolded front and side walls when the container is collapsed, and the flap then will extend beneath the front and side walls.

8. A folding container comprising a rear wall having one forwardly projecting flange rigid therewith along its upper edge, and another along its lower edge, a bottom and front and side walls adapted to interfold and fit behind and between the forward edge of the flanges, a cover hinged at the forward edge of the upper flange and adapted to swing downward over the interfolded walls, flange extensions on the rear wall and cover cooperating to cover the ends of said interfolded walls with the cover thus swung down, and means interengageable between the cover and the lower flange of the rear wall to maintain the parts in folded relation.

GUY M. HARTSON.