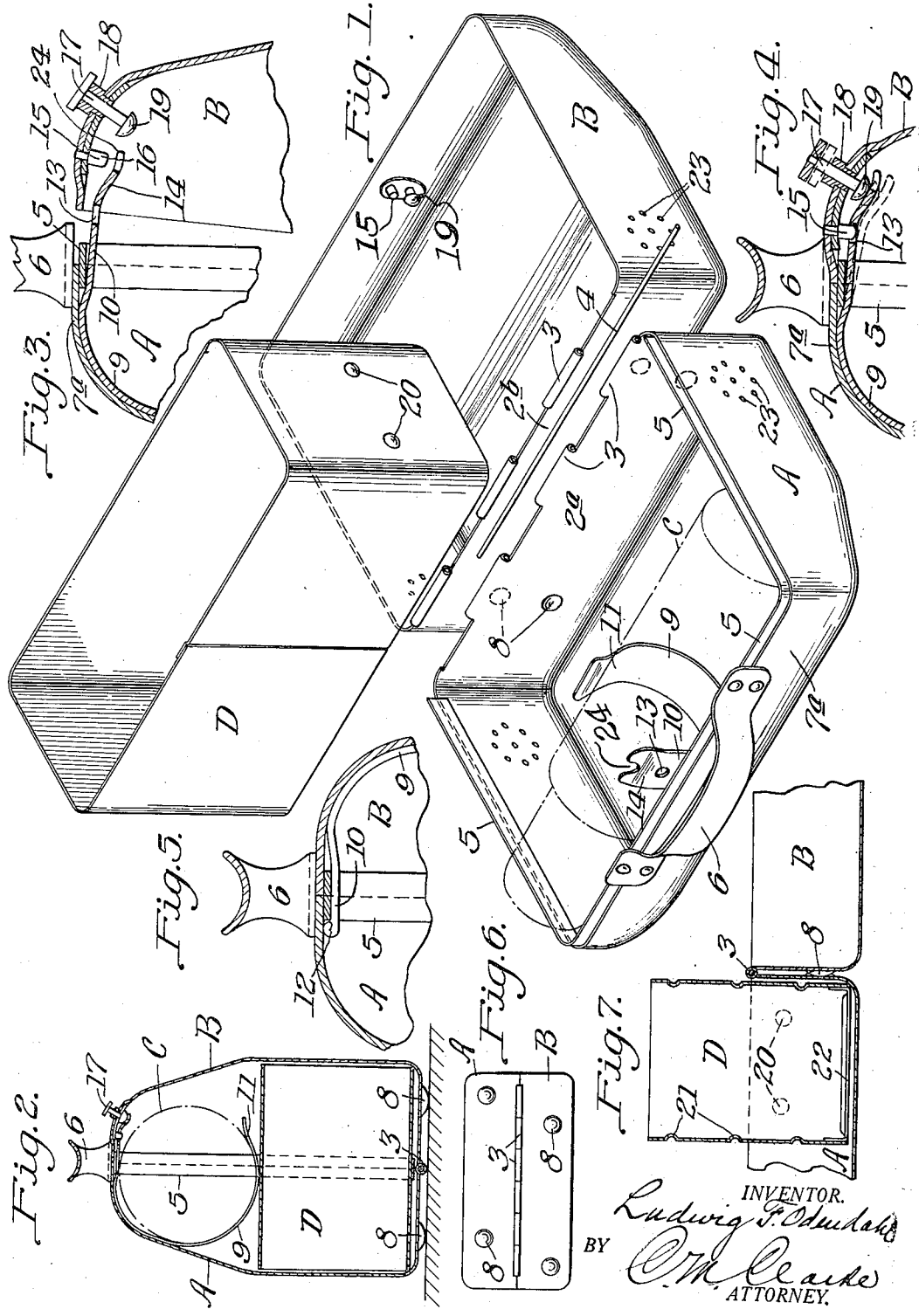
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LUNCH BOX

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LUNCH BOX

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This invention relates to improvements in lunch boxes, and particularly to a lunch box or container provided with means for receiving and carrying a thermos bottle therein.

Lunch boxes or kits of the character stated are in common use, and generally comprise a hollow body portion or box and a hollow cover member hinged together. In all such forms of which I am aware, however, the box and cover portions are of different or unlike form, requiring separate dies and manufacturing operations for their production, thereby increasing the cost of the finished article.

It is therefore a prime object of my invention to provide a lunch box of the character stated capable of manufacture in duplicate symmetrical portions which may be hinged together to form a simple and inexpensive construction.

A further object is to provide, in a box of the type described, means on one member thereof for receiving a thermos bottle, and disposed for and coacting with means on the other box member for securing the box in closed position.

Further objects and advantages will become apparent from the following description taken in connection with the accompanying drawing wherein:

Fig. 1 is an exploded perspective view of an embodiment of my invention, showing the duplicate symmetrical box portions separated prior to assembly;

Fig. 2 is a cross-sectional view of the assembled lunch box in closed position;

Fig. 3 is an enlarged detail sectional view of the latch in closing position;

Fig. 4 is a view similar to Fig. 3, showing the box and latch in closed position;

Fig. 5 is a view similar to Fig. 4, showing a modified form of latch;

Fig. 6 is a bottom plan view of the closed box; and

Fig. 7 is a sectional detail view showing the box in extreme open position.

Referring to the drawing, A and B respectively designate two duplicate symmetrical halves or portions of a lunch box, preferably formed of sheet metal, as for example, thin sheet aluminum or tin, capable of being drawn or worked into the desired shape. As clearly shown in the drawing, the said portions A and B are of the same size and shape and can therefore be produced with a single die or set of dies.

Each of said portions includes bottom, top and end walls disposed in substantially rectangular relation, open on one face thereof and having the remaining face closed by an integral side wall, with the several corners or meeting lines of all pairs of walls rounded for strength and appearance, and to facilitate manufacture.

The marginal edges of the bottom walls 2*a* and 2*b* of the respective box portions A and B are formed with integral complementary apertured hinge elements 3, spaced apart and of uneven series, so as to interfit and form complete and continuous alternating hinge elements when joined together in alinement and pivotally connected by a central hinge pin 4, as will be readily understood.

One of said box portions, as for example, the portion A, is preferably provided with a separate narrow sheet metal strip 5 riveted or spot welded to the inner surfaces of the top and end walls of said portion A, and extending outwardly beyond the marginal edges of said walls to constitute a jamb or closure strip or flange for telescoping engagement within the open face of the other box portion B when closed upon the portion A, as in Fig. 2, thereby effectively sealing the joint between the box portions against the entrance of dirt and moisture.

Either of said box portions, as for example, the portion A, is provided with an outwardly disposed carrying handle 6 riveted or welded to the top wall 7*a* thereof by its ends, said handle being disposed longitudinally of the marginal edge of said top wall 7*a* and extending an equal amount on either side of said edge. By such construction the handle is centrally disposed with respect to the box when closed, and will serve to maintain an even balance when the box is carried in the hand.

Duplicate rounded outward projections or feet 8 are formed in the bottom walls 2*a* and 2*b* of the respective portions A and B, for maintaining the closed box in an upright position on a level surface. Said projections are preferably slightly greater in depth than the projecting portion of the hinge element. (See Fig. 2.)

I also prefer to provide the projections 8 in staggered relation to prevent interference thereof when the box is in the full or extreme open position of Fig. 7, said projections thereby engaging the bottom wall of the opposite box portion to prevent strain upon the hinge.

One of the box portions is provided with an arcuate resilient thermos bottle receiving clip 9 centrally disposed longitudinally of said box and passing within the confines of the top and side walls thereof. Said spring clip is secured to the concaved face of the corner junction of said top

and side walls as by riveting or spot welding, and is thus provided with spaced-apart resilient terminal ends 10 and 11 for ready insertion and holding engagement of a thermos bottle C. Said terminals 10 and 11 extend outwardly beyond the plane of the open face of said box portion in which the clip is mounted, so as to provide a sufficient support for the thermos bottle without possibility of disengagement thereof from the clip when the box is in the closed upright position of Fig. 2.

The free terminal 10 of the clip immediately below the top wall of the box portion, may be extended a sufficient amount to be utilized in the provision of a latching means for securing the box portions in closed position. By making the clip of spring steel, the resiliency of the free end 10 thereof may be employed in various manners to effectively secure the box.

For example, by mounting the clip 9 on the box portion B as in Fig. 5, the free resilient end 10 thereof will coact with the jamb strip 5 of the box portion A, by the engagement there-behind of a rounded terminal 12 on said clip end, thereby frictionally securing the box portions in closed position.

I prefer however, to provide the end 10 of the clip 9 with a central aperture 13 and an inclined terminal portion 14 sloping inwardly of the box away from said aperture.

The other box portion is provided with a latching means including an inwardly projecting lug or pin 15 having a rounded or tapered end 16. Upon closing the box as in Fig. 3, the end 16 rides up on the inclined portion 14 of the clip end 10 to deflect the latter and permit the entrance of the pin 15 in the aperture 13, the box being tightly closed when the pin registers with said aperture.

For the purpose of releasing the latch device, I also provide a detent 17 freely slidable in a provided bushing 18 secured to the box portion B rearwardly of the pin 15. Said detent extends within the box portion B and is provided with a rounded button head 19, said head also riding up on the inclined portion 14 of the clip end 10 upon closing the box, the coaction whereof causes the detent to move outwardly of the box, as in Fig. 4, when the pin 15 enters its aperture 13.

Hence, to open the box, the latch device is released by depressing the detent and applying an opening movement to the box portions with the hands, the head 19 of the detent having sufficient travel to depress the clip end 10 and disengage the pin and aperture, as will be readily understood. In opening, opposite pressure may be exerted by the hands against handle 6 and the depressed terminal of detent 17. As shown, inclined terminal portion 14 of clip end 10 is provided with a rounded recess 24 facilitating entrance and easy riding action of the rounded button head 19 in advancing over the clip terminal, in closing.

I furthed provide a removable sandwich or food compartment element D formed of a rectangularly disposed band of sheet metal or the like and having projecting friction lugs 20 at its ends for engaging the end walls of the box portion to which it is applied for removable connection therewith.

If desired, the compartment element D may be provided with integral strengthening ribs 21 as in Fig. 7, and also, a plurality of U-shaped retaining cross strips 22 may be secured over one open face of said element to permit packing the compartment with food when removed from the box. 23 designates ventilating apertures formed in the end walls of the duplicate box portions.

From the foregoing it will be seen that I have provided a lunch box, which, by reason of its construction of duplicate portions, can be simply and economically manufactured, to produce a durable and attractive article.

Various changes and modifications are contemplated within the scope of the appended claims.

What I claim is:

1. In a lunch box comprising two box forming side portions hinged together, an arcuate resilient clip for receiving a thermos bottle secured between its terminals within the corner of one box portion, the outer terminal of said clip having means co-operable with a latching device, and latching means on the other side portion adapted to depress the outer clip terminal towards its inner terminal and to make holding connection therewith.

2. In a lunch box comprising two box forming side portions hinged together, a resilient clip having freely movable terminals for receiving a thermos bottle mounted between its terminals in one side portion, said clip having its outer resilient terminal projecting and cooperating with means on the other box portion for depressing said terminal towards the other terminals in removably securing the box forming sides in closed position.

3. In a lunch box comprising two box forming side portions hinged together, a resilient clip for receiving a thermos bottle secured between its ends in one side portion, said clip being arcuate in form and having spaced-apart terminal ends, one of said ends having means thereon cooperating with means on the other side portion for removably securing the box sides in closed position and for depressing it towards the other clip terminal.

4. In a lunch box comprising two box forming side portions hinged together, a resilient arcuate clip for receiving a thermos bottle secured between its ends within one side portion and having a projecting apertured free end, a projecting pin on the other box portion for engaging the aperture in the clip end to secure the box in closed position, and means for depressing the apertured end of the clip towards its other end and disengaging said pin and aperture.

5. In a lunch box comprising two box forming side portions hinged together, a resilient arcuate clip for receiving a thermos bottle secured between its ends within one side portion and having a projecting apertured free end and an opposite clasping end, an inwardly projecting pin on the other box portion for engaging the clip aperture to secure the sides in closed position, and a detent movably mounted on said other side portion for depressing the apertured clip end and disengaging the pin and aperture.

6. In a lunch box comprising two box forming side portions hinged together, a resilient part circular clip for receiving a thermos bottle mounted between its ends in one side portion, said clip having a projecting apertured free end provided with an inclined terminal portion sloping inwardly of the box and beyond said aperture, a projecting pin on the other side portion for slidably engaging said inclined portion to deflect the free end of the clip and permit entrance of the pin in said aperture when the sides are closed together and a movable detent

mounted on said other side portion, said detent having an inner rounded terminal head for deflecting said inclined portion to disengage the aperture and pin.

7. In a lunch box comprising two box forming side portions hinged together, a latching means for the box including a resilient member mounted on one side portion, said member having an aperture therein and an inclined terminal portion sloping inwardly of the box toward the other box portion and having bifurcated terminals at each side of a middle clearance opening, a projecting pin for engaging said inclined portion by its terminal end to slidably deflect the member and permit entrance of the pin in said aperture when the sides are closed together, and a movable detent mounted in said other side portion having an inner terminal rounded head for engagement between the bifurcated terminals and further movement for deflecting said inclined portion to disengage the aperture and pin.

8. In a sheet metal lunch box, the combination of a hinged pair of box forming sides having converging rounded side walls and meeting edges, an arcuate resilient bottle holding clip secured between its free terminals to the inner rounded face of one wall, one free terminal having an inwardly inclined portion provided with a pin hole, the other wall having an inwardly extending pin for clip terminal depression and locking engagement with said hole in closing the sides, and a transversely mounted reciprocable detent mounted in the other wall provided with a button terminal adapted to ride over the clip terminal with outward reciprocable movement and to be depressed from the exterior to disengage it from pin and hole connection in opening.

9. In a sheet metal lunch box, the combination of a hinged pair of box forming sides having converging rounded side walls and meeting edges, an arcuate resilient bottle holding clip secured between its free terminals to the inner rounded face of one wall, one free terminal having an inwardly inclined portion provided with a pin hole and a rounded clearance opening between its ends, the other wall having an inwardly extending pin for clip terminal depression and locking engagement with said hole in closing the sides, and a transversely mounted reciprocable detent mounted in the other wall provided with a button terminal adapted to ride between and over the clip terminal ends with outward reciprocable movement and to be depressed from the exterior to disengage it from pin and hole connection in opening.

10. In a lunch box, the combination of two box forming side portions hinged together, each side portion having outermost inwardly rounded tops, a resilient clip located within the rounded top of one side portion having freely movable terminals for receiving a thermos bottle therebetween, said clip having its outer resilient terminal projecting and cooperating with means on the other box portion for depressing said terminal towards the other terminal in removably securing the box forming sides in closed position.

11. In a lunch box, the combination of two box forming side portions hinged together, each side portion having outermost inwardly sloping sides and inwardly rounded tops, a resilient clip located within the rounded top of one side portion having freely movable terminals for receiving a thermos bottle therebetween, said clip having its outer resilient terminal projecting and cooperating with means on the other box portion for depressing said terminal towards the other terminal in removably securing the box forming sides in closed position.

12. In a lunch box, the combination of a pair of duplicate symmetrical box forming side portions each having corresponding bottom, end, and side walls, said bottom walls being hinged together and the side walls having outermost inwardly sloping and inwardly rounded tops, a resilient clip located within the rounded top of one side portion having freely movable terminals for receiving a thermos bottle therebetween, said clip having its outer resilient terminal projecting and cooperating with means on the other box portion for depressing said terminal towards the other terminal in removably securing the box forming sides in closed position.

13. A lunch box as in claim 12 characterized by bottom supporting projections, those on one portion being in non-registering relation to those on the other portion.

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