Feb. 26, 1924. 1,484,882

E. E. GRAY

LUNCH BOX

Filed March 19, 1923

Fig. 1.

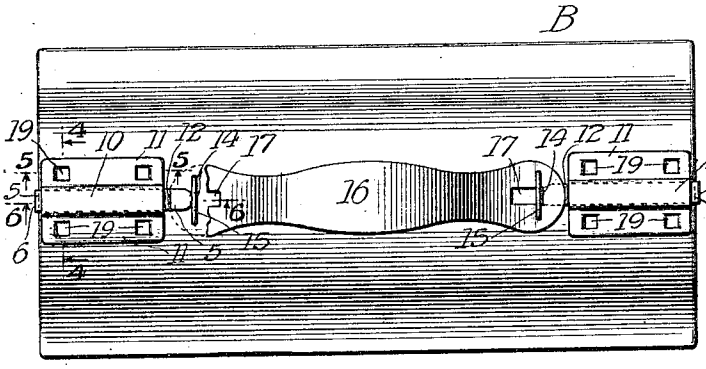


Fig. 2.

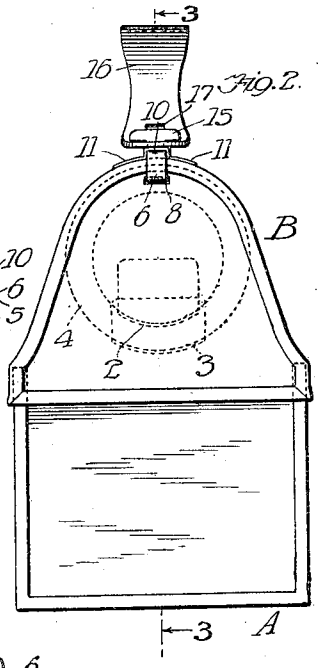


Fig. 3.

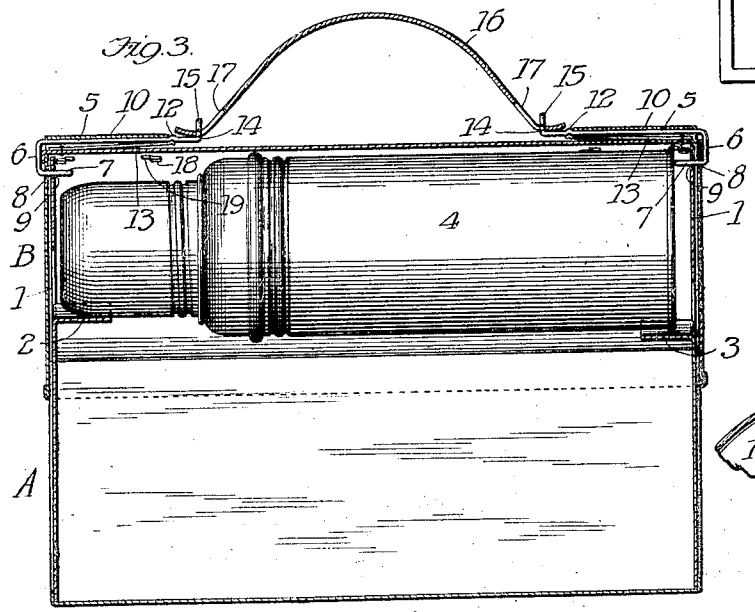


Fig. 4.

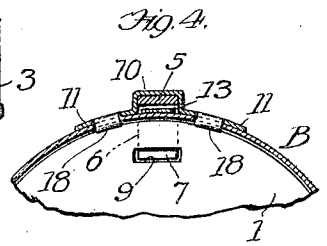


Fig. 5.

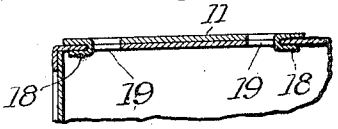
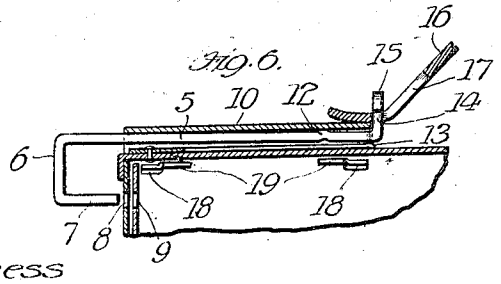


Fig. 6.



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UNITED STATES PATENT OFFICE.

EDWARD E. GRAY, OF PLANO, ILLINOIS, ASSIGNOR TO LINSLEY S. GRAY AND EDWARD E. GRAY, JR., BOTH OF PLANO, ILLINOIS, COPARTNERS DOING BUSINESS AS GRAY BROTHERS.

LUNCH BOX.

Application filed March 19, 1923. Serial No. 625,982.

To all whom it may concern:

Be it known that I, EDWARD E. GRAY, a citizen of the United States, and a resident of Plano, in the county of Kendall and State of Illinois, have invented an Improved Lunch Box, of which the following is a specification.

This invention relates to lunch boxes.

The object of the invention is to provide means for supporting a thermos bottle within the cover of the box, constructed and arranged to prevent accidental displacement thereof when the cover is closed, together with improved locking means for securing the cover of the box in closed position, which will be particularly positive, thus preventing accidental opening of said box with probable spilling of the contents thereof.

To effect the foregoing object, a lunch box of my invention comprises the various features, combinations of features and details of construction hereinafter described and claimed.

In the accompanying drawings, in which my invention is fully illustrated.

Figure 1 is a top plan view of a lunch box embodying my invention and improvements, showing the cover thereof closed.

Figure 2 is an end view thereof, showing, in dotted lines, a thermos bottle supported therein.

Figure 3 is a sectional view of my improved box on the line 3—3 of Fig. 2, the thermos bottle being shown in side view; and

Figures 4, 5 and 6 are enlarged fragmentary sectional views on lines 4—4, 5—5 and 6—6 of Fig. 1, respectively, the means for securing the cover in closed position being shown disengaged in Fig. 6.

Referring now to the drawings, A designates the body portion of the box and B the cover thereof, said cover fitting over the upper edge of the body of the box and its position thereon being defined by shoulders formed parallel with its lateral edges adapted to rest upon the upper edges of the lateral sides of the body portion of the box, in a usual manner.

Both the body portion and the cover of the box are made of metal, usually tinplate.

The end walls of the body portion A of the box extend above the side walls thereof, as shown at 1, and are shaped to conform substantially to the shape in cross-section of the cover of the box, being proportioned so as to fit within the same.

Formed on the projecting upper portions 1 of the end walls of the body portion A of the box, are lugs or brackets 2 and 3 adapted to form supports for a thermos bottle 4, shown as resting upon the same. Said brackets 2 and 3 can conveniently be formed by stamping them directly from the upper end portions of the body of the box, and the cover of the box is made of such shape in cross-section and is so proportioned that when secured to the body portion of the box, it will confine said thermos bottle in position on said supporting lugs 2 and 3. As shown, the upper portion of the cover B of the box in which the thermos bottle 4 is confined, is formed on the arc of a circle substantially concentric with and slightly larger than the thermos bottle supported on the lugs or brackets 2 and 3.

With the described construction, it is obvious that when the cover B of the box is adjusted to the body portion thereof, it will securely hold the thermos bottle in position on the brackets 2 and 3.

Where the thermos bottle is larger at one end than at the other, as is usually the case, the lug 2 on which the smaller end of the thermos bottle rests, is preferably formed at a sufficient distance above the lugs 3 which supports the larger end of the bottle, so that the sides of said bottle will be substantially parallel with the circular upper side of the box cover B.

In the preferable construction shown, the cover B of the box is adapted to be secured to the body portion A thereof by suitable catches adapted for engaging opposite ends of the cover with the upwardly extending projections 1 of the end walls of the body portion of the box. Said catches are duplicates of each other, and a description of one thereof will apply equally to both. Accordingly, the description of said catches is in the singular.

A preferable form of catch for securing the cover in position consists of a strip of sheet metal 5, slidably fitted to a bearing formed at the end of the box cover, which comprises downwardly and inwardly turned sections 6 and 7, the section 6 forming a connection between the section 7 and the main portion 5 of the catch. The section

7 forms the catch proper, and is adapted to engage holes 8 and 9 formed in the end wall of the cover and in the upwardly extending portions 1 of the end walls of the box, the relation being such that engagement and disengagement of the catch 7 with and from the holes 8 and 9 may be effected by endwise movement of the main supporting section 5 of said catch.

As shown, the slide bearing for the main supporting section 5 of the catch is formed by a struck-up portion 10 of a plate 11 secured to the box cover. When the plate 11 is secured to the box cover, the wall thereof will close the open side of the bearing in said plate and thus confine the slide section 5 of the catch therein, the relation being preferably such that the dimension of the slide bearing corresponding to the thickness of the slide portion 5 of the catch will be sufficiently greater than the thickness of the slide section of the catch to permit limited play of said slide section in said bearing. Said slide section is adapted to be secured in position corresponding to full engagement of the catch proper 7 with the holes 8 and 9 in the cover and body portions of the box, by engagement of a shoulder 12 on the slide portion 5 of said catch with the inner end of the struck-up portion 10 of the bearing plate 11, such engagement of said shoulder 12 with the inner end of said bearing plate being effected by a spring 13 secured to the box cover beneath the slide portion of the catch. As shown, the spring 13 is a leaf spring, its outer end being riveted to the box cover in such relation that the free end of said spring will be substantially even with the end of the struck-up portion 10 of the plate 11, designed for engagement by the shoulder 12 on the supporting section 5 of the catch. With this construction, it is obvious that when the shoulder 12 is in engagement with the end of the bearing plate 11, the catch will be secured substantially in positive engagement with the holes 8 and 9 in the cover and body portion of the box, respectively.

Movement of the slide portion 5 of the catch in a direction to effect disengagement of the catch 7 from the holes in the cover and the body portion of the box, is limited by a stop consisting, as shown, of the turned up inner end 14 of said slide portion, said turned up end portions also providing convenient means for depressing said slide portions 5 of the catch against the force of the spring 13, to effect disengagement of the shoulder 12 on said slide portion 5 from the end of the struck-up portion 10 of the bearing plate 11 and for exerting pressure on said slide portion to effect disengagement of the catch 7 from the holes in the cover and body portion of the box.

In the preferable construction shown, also, a T-head 15 is formed on the turned up section 14 of the slide section 5 of the catch to which an end of the handle 16 on the box, which may conveniently be made of leather, is attached, said handle being provided with slots 17 for attaching the ends thereof to the T-heads 15.

In the preferable construction shown, also, the bearing plate 11 is adapted to be secured to the cover of the box by means of lugs 18 formed by stamped down portions of said plate, which extend through and are bent back over the remote edges of holes 19 formed in the box cover B in proper position. The holes formed in the bearing plate 11 by stamping out the lugs 18 preferably register with the holes 19 stamped in the box cover, thus providing ventilation for the box.

I claim—

1. A lunch box comprising a body portion and a cover therefor, said cover extending above the body portion of the box and being of sufficient size to contain a thermos bottle, the end walls of the body portion of the box comprising portions adapted to extend upwardly into the cover of the box, means for supporting a thermos bottle on the upward extensions of said end walls, and means for securing the cover to the body portion of the box, substantially as described.

2. A lunch box comprising a body portion and a cover therefor, said cover extending above the top of the body portion of the box and being shaped and proportioned to receive a thermos bottle and the end walls of the body portion of the box extending upwardly within the box cover, lugs on the upward extensions of the end walls of the box body adapted to support a thermos bottle, the box cover being shaped to retain said thermos bottle upon said lugs when said cover is adjusted to the body portion of the box, and means for securing the cover to the body portion of the box, substantially as described.

3. A lunch box as specified in claim 2, in which the upwardly extending portion of the cover of the box forms substantially the arc of a circle concentric with and slightly larger than a thermos bottle supported within the box and enclosed by the box cover, substantially as described.

4. A lunch box as specified in claim 1, in which the means for securing the cover to the body portion of the box comprises catches adapted for engagement with and disengagement from holes formed in the end walls of the cover and in the upward projections on the end walls of the body portion of the box, and slide portions for supporting said catches fitted to bearings on the box cover so as to be movable endwise therein, substantially as described.

5. A lunch box as specified in claim 4,

in which the bearings for the slide portions of the catch are formed by struck-up portions of plates secured to the cover of the box, substantially as described.

6. A lunch box as specified in claim 4, in which the means for securing the cover of the box to the body portion thereof comprises means for locking the catches in positions corresponding to engagement of the catches with the holes in the ends of the box cover and in the upward projections on the end walls of the body portion of the box, substantially as described.

7. A lunch box as specified in claim 6, in which the means for securing the catches in locked position, comprise shoulders on the supporting slide portions of the catches adapted to engage rigid parts of the bearing plates secured to the box cover, and springs applied to the slide portions of said catches adapted to effect engagement of the shoulders thereon with said bearing plates, substantially as described.

8. A lunch box as specified in claim 7, in which the springs applied to the slide portions of the catches are leaf springs inserted beneath the slide portions of said catches, substantially as described.

9. A lunch box as specified in claim 4, in which the inner ends of the slide portions of the catches are turned up, forming stops which prevent disengagement of the slide portions of said catches from their bearings, substantially as described.

10. A lunch box as specified in claim 9, which comprises a handle made of pliable material and the means for securing said handle to the box comprises T-heads formed on the upturned ends of the slide portions of the catches adapted to engage slots formed in the handle, substantially as described.

11. A lunch box as specified in claim 5, in which the means for securing the bearing plates for the slide portion of the catches to the box cover consist of lugs formed by stamped out portions of said plates which are bent around the remote ends of holes formed in the box cover, the holes thus formed in said plates and cover registering with each other thereby providing ventilation for the box, substantially as described.

In witness that I claim the foregoing as my invention, I affix my signature this 27th day of February, A. D. 1923.

EDWARD E. GRAY.