Nov. 13, 1956 I. IDSO 2,770,514

LUNCH TRAY HOLDER

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FIG. 1.

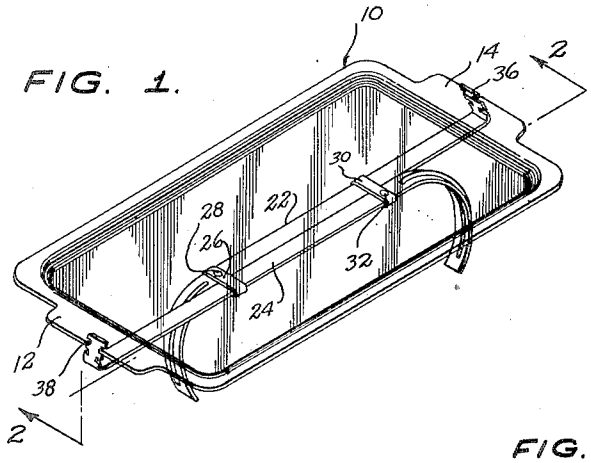


FIG. 2.

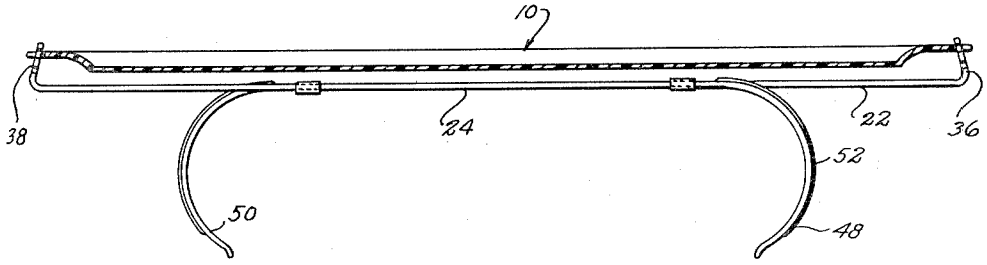
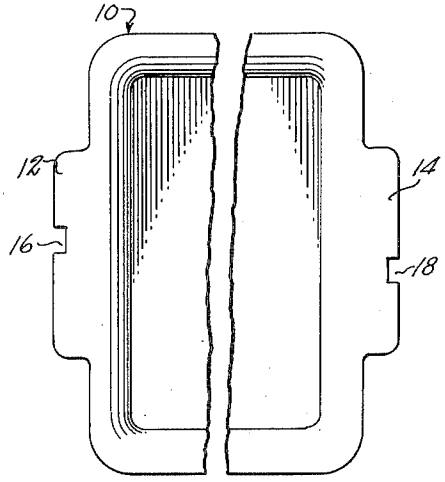


FIG. 3.



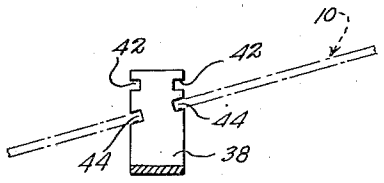


FIG. 4.

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LUNCH TRAY HOLDER

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10 Claims. (Cl. 311—23)

This invention relates to lunch trays and more particularly to trays combined with holders adapted to straddle a person's legs and be secured thereby.

It is an object of my invention to provide a simple and economical structure for holding a tray securely on a person's lap with a minimum of effort.

It is a further object of my invention to provide an extremely simple bracket arrangement to be used in conjunction with a tray.

It is an additional object of my invention to provide an arrangement of a tray and means for holding it on a person's lap in such a manner that the tray may be set at a particular angle with respect to the horizon to prevent tilting, depending upon the length of the user's legs.

In general my invention contemplates a structure comprising a tray and a bracket having a pair of relatively slidable parts which can be set to grip the outer edges of the tray by means of upwardly extending flanges. Further, the parts of the bracket are formed to extend downwardly in a curved fashion so as to comfortably engage the outer surfaces of a person's legs. The user may, by exerting a divergent pressure on his legs, cause the bracket elements to grip the tray very forcibly so as to minimize any possible danger of slippage of the tray.

My invention will now be described in detail in conjunction with the appended drawing in which:

Fig. 1 is a perspective showing the combination of a tray and the tray holder;

Fig. 2 is a section through 2—2 of Fig. 1;

Fig. 3 is a fragmentary plan view of the tray; and

Fig. 4 is a fragmentary section showing the tray-gripping flange of one of the holder elements.

With reference to the drawing, my invention comprises a tray **10** having opposite and parallel edges **12** and **14** formed as ears so as to serve conveniently for handling the tray, in a conventional manner, and being provided with the respective notches **16** and **18** which are off-set as shown in Fig. 3 for a purpose to be hereinafter described. The tray is shown as transparent in order to clearly reveal structural details of the holder as by looking therethrough in Fig. 1.

The holder for the tray comprises a pair of relatively slidable elements **22** and **24** having edge to edge contiguous slidability as will be apparent from Fig. 1. These bracket elements each carries a metallic strap which slidably encompasses the other bracket element. For example, the element **22** carries the strap **26** riveted thereto, as by the rivet **28**, while the element **24** carries strap **30** riveted thereto as by a rivet **32**.

Each holder element has an upwardly turned tray engaging flange. Thus, element **22** has the flange **36** while element **24** has the flange **38**. These flanges are adapted to grip the tray **10** and may be provided with notches as shown in detail in Fig. 4 viz., a pair of horizontal notches **42** and a pair of slanted notches **44**. The notches **16** and **18** can be gripped within a pair of corresponding notches, for example, **42** or **44**, at each end of the tray **10**, and thus the plane of the tray will be either parallel

or predeterminedly slanted with respect to the plane of the holder elements which are presumed to lie flat across the user's legs. It should now be apparent that the off-set of the notches **16** and **18** in the tray **10** is required for purposes of registering with the notches in the flange members **36** and **38**, since these flange members are obviously offset with respect to each other due to the width of the holder elements.

Each holder element has a downwardly bent flange for gripping the exterior surfaces of the user's legs. For example, the element **22** has the flange **48** while the element **24** has the flange **50**. The flanges are curved as shown in Fig. 2 so as to comfortably adapt themselves around the fleshy part of the user's legs; also, the flanges are provided with ribs such as the rib **52** for rigidity.

The elements **22** and **24** may be slid with respect to each other so as to either grip the edges of a tray, or to release the edges. Further, it will be apparent that when the tray is astraddle the legs of a user the gripping force of the flanges **36** and **38** may be increased and made very secure by mere divergent leg pressure against the flanges **50** and **52**. Normally, inherent friction of the slidable elements with each other is sufficient to maintain a grip on the tray without conscious effort on the part of the user.

The holder and tray is an entirely practical and usable combination with or without the notch engagement and the invention is in no way limited to the use of the notch coaction. However, the notch arrangement can perform the useful function particularly shown in Fig. 4 wherein it may be seen that the tray **10** (in phantom) can be set at a slant. While in Fig. 4 the tray **10** is shown as having an upward tilt, it will readily be understood that should my invention be used by a person having short legs or by a child sitting in a chair of normal height, the tray **10** will assume a more nearly horizontal and safer position than would otherwise be the case. For persons of normal leg length the tray can either be set below the slanting notches so that the notches **16** and **18** will merely straddle the outer edges of the flanges **38** and **36**, respectively, or the tray can be assembled to the bracket so as to have notch engagement in the notches **42**. However, in such instances the tray might tend to tilt downwardly when on the lap of a person having short legs and accordingly the slanted, adjusted position as shown in Fig. 4 would be more desirable since such adjustment would have the tendency to bring the tray **10** to approximately level position.

In retrospect the bracket elements may be made identical to each other except in the instance where slanted notches are utilized. For most purposes the notches are not deemed necessary and the tray may simply rest directly on the upper flat surfaces of the holder elements, being frictionally gripped at the edges **12** and **14** by the flanges **38** and **36** respectively. However, in the case of invalids and in certain other special applications, the use of notches as described above may be desirable to add an extra measure of security.

Having thus described my invention, I am aware that various changes may be made without departing from the spirit thereof and accordingly I do not seek to be limited to the precise illustrations herein given except as set forth in the appended claims.

I claim:

1. A tray and a holder therefor, said holder comprising a pair of relatively slidable members positioned below the tray so as to rest across the legs of a user and having upwardly extending flanges for engaging opposite edges of said tray and downwardly extending flanges for engaging the legs of said user.

2. A tray and a holder therefor, said holder comprising a pair of relatively slidable members positioned below

the tray so as to rest across the legs of a user and having upwardly extending flanges for engaging opposite edges of said tray and downwardly extending flanges for engaging the legs of said user, a retainer element secured to one of said members and slidably encompassing the other of said elements.

3. A tray and a holder therefor, said holder comprising a pair of relatively slidable members adapted to rest across the legs of a user and having upwardly extending flanges for engaging opposite edges of said tray and downwardly extending flanges for engaging the legs of said user, each of said members having a retainer element secured thereto and slidably encompassing the other of said elements.

4. A tray and a holder therefor, said holder comprising a pair of relatively slidable members adapted to rest across the legs of a user and having upwardly extending flanges for engaging opposite edges of said tray and downwardly extending flanges for engaging the legs of said user, said members being in edge to edge contiguity and having flat sides for resting on said user's legs, including retainer means securing said members together as a unit removable from said tray.

5. A tray and a holder therefor, said holder comprising a pair of relatively slidable members adapted to rest across the legs of a user and having upwardly extending flanges for engaging opposite edges of said tray and downwardly extending flanges for engaging the legs of said user, wherein said members are slidable with respect to each other and with respect to said tray whereby said user may effect outward pressure with his legs against said downwardly extending flanges to cause relative motion of said members for effecting secure gripping of said tray by said upwardly extending flanges.

6. A tray and a holder therefor, said holder comprising a pair of relatively slidable members adapted to rest across the legs of a user and having upwardly extending flanges for engaging opposite edges of said tray and downwardly extending flanges for engaging the legs of said user, means intermediate said tray and said slidable members for holding said tray at a predetermined angle with respect thereto.

7. A tray and a holder therefor, said holder comprising a pair of relatively slidable members positioned below the tray so as to rest across the legs of a user and having upwardly extending flanges for engaging opposite edges

of said tray and downwardly extending flanges for engaging the legs of said user, means intermediate said tray and said slidable members for holding said tray at a predetermined angle with respect thereto, said means comprising notches in said tray edges coacting with notches in said upwardly extending flanges.

8. A tray and a holder therefor, said holder comprising a pair of identical members, each having an end bent upwardly for engaging an edge of said tray and an opposite end bent downwardly for engaging the side of a leg of a user, said members being oriented in opposed directions so as to grip parallel edges of said tray and both legs of said user.

9. A tray and a holder therefor, said holder comprising a pair of identical members, each having an end bent upwardly for engaging an edge of said tray and an opposite end bent downwardly for engaging the side of a leg of a user, said members being oriented in opposed directions so as to grip parallel edges of said tray and both legs of said user, including means for retaining said members slidably with respect to each other and with respect to said tray.

10. A tray and a holder therefor, said holder comprising a pair of identical members, each having an end bent upwardly for engaging an edge of said tray and an opposite end bent downwardly for engaging the side of a leg of a user, said members being oriented in opposed directions so as to grip parallel edges of said tray and both legs of said user, including means for retaining said members slidably with respect to each other and with respect to said tray, said means comprising a strap carried by each member and slidably encompassing the other of said members.

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