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C. P. NEATS ET AL

2,039,922

LAP TRAY

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Fig. 1.

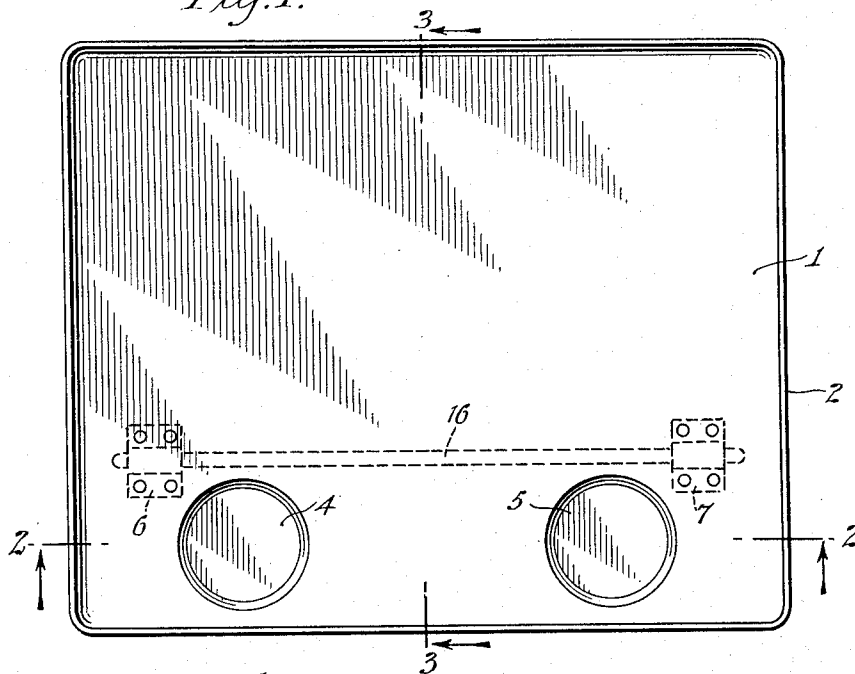


Fig. 2.

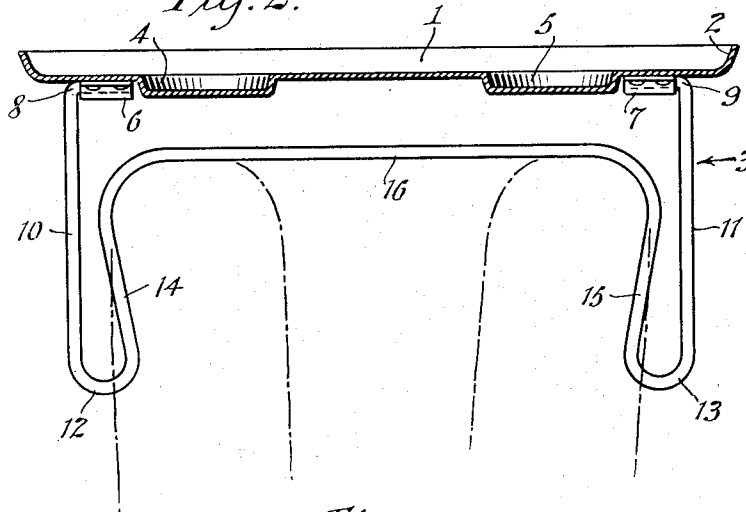
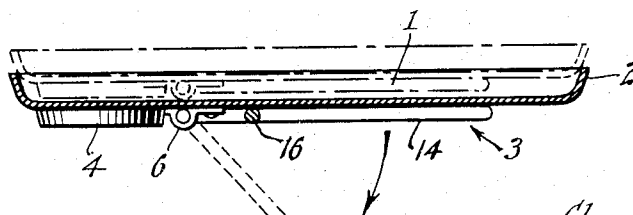


Fig. 3.



WITNESSES

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## UNITED STATES PATENT OFFICE

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## LAP TRAY

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2 Claims. (Cl. 311—25)

This invention relates to an improved lap tray, and has for an object to provide a construction which will present a desired support for various articles and which may be firmly held on the knees of a person during the use of the tray.

Another object of the invention is to provide a lap tray having a supporting body and a foldable swinging knee engaging structure adapted to permit the knees to hold the tray properly in place.

A further object, more specifically, is to provide a lap tray having a substantially flat body with a folding swinging knee engaging member, the parts of the body being so formed as to permit nesting of one tray in respect to the next adjacent tray with a minimum of lost space.

In the accompanying drawing:

Fig. 1 is a top plan view of a lap tray disclosing an embodiment of the invention;

Fig. 2 is a sectional view through Fig. 1 approximately on the line 2—2, a pair of knees being shown in dot and dash lines; and

Fig. 3 is a sectional view through Fig. 1 approximately on the line 3—3, the knee engaging member being folded and a second tray being shown in dot and dash lines.

Referring to the accompanying drawing by numeral, 1 indicates a flat support having an upstanding peripheral wall 2 which is preferably at a slight angle as shown in Fig. 2. The flat support 1 with the wall 2 may be termed a lap board and when associated with the support 3 presenting the complete lap tray. The lap board consisting of members 1 and 2 may be made of comparatively thin sheet metal, wood or other material of any desired size, so as to be readily used on the lap of a person. The complete lap tray may be used in automobiles or in the home or other places to support various articles when a person is sitting down.

As shown in the accompanying drawing, the body 1 is provided with depressed portions 4 and 5 which are depressed to a distance less than the height of the wall 2 so that a desired nesting may be secured when several are to be stored together. When using the device as means for supporting food, one or more cups of coffee or other liquid may be placed in the recesses or depressed portions 4 and 5 and other articles of food placed directly on the remaining part of the body 1. While only two depressions have been shown in the accompanying drawing, it will be evident that one might be used or more than two without departing from the spirit of the invention. These

depressions are desirable for holding glasses or cups containing liquid whereby they are prevented from sliding over the surface of body 1 when the same is arranged at a slight angle.

On the under surface of the body near one edge are arranged the straps 6 and 7 into which the ends 8 and 9 of the support 3 rotatably fit. The support 3 may be made out of metal or other material in any desired shape or cross section, but preferably is made from round wire of a rather heavy gage as, for instance, wire of one-fourth of an inch in diameter. This wire is bent to form the journal members 8 and 9 which merge into the side bars 10 and 11 which when in use extend almost in a vertical plane which are bent at the points 12 and 13 so as to form the inclined inner side bars 14 and 15. The bars 14 and 15 are connected by a top section 15 which rests on top of the knees or legs when the device is in use. The slant of the inclined bars 14 and 15 are such that the legs may be given a tendency to move apart when the device is moved and thereby interlocked to a certain extent with the depending portions of the support 3. The depending portions of the support 3 consist on one side of bars 10, 12 and 14 and on the other side of bars 11, 13 and 15. If the diameter of the wire of which support 3 is made is one-fourth of an inch then the depressions 4 and 5 may be one-fourth of an inch or less, so that when the support 3 is folded flatwise against the bottom of the body 1 it will be slightly above the bottom of the depressions 4 and 5, which bottom is preferably on a level with the lowermost points of straps 6 and 7 when the parts are in the position shown in Fig. 2.

Where there are two or more lap trays of the kind described they may be nested as indicated in full and dotted lines in Fig. 3. It will be noted that the depressed portions 4 and 5, straps 6 and 7 and support 3 will all be positioned below the upper edge of wall 2 and part of the superposed tray also below the upper edge of wall 2. It will also be evident that the height of wall 2 may vary as may be desired and when varied so as to be lower the depressions 4 and 5 should be of less depth than the straps 6 and 7 and should extend downwardly to a less extent so as to permit ready nesting as shown in Fig. 3.

As shown in the accompanying drawing, all the parts are made of metal but, if desired, all the parts could be made of other material or part could be made of wood or other material and the remaining parts of metal. For instance, the body

1 with its wall 2 could be made of wood and the support 3 with straps 6 and 7 made of metal.

We claim:

1. A metallic lap tray formed with a flat sheet metal body having a turned up periphery presenting an upstanding wall at the perimeter of the body and a depressed portion adapted to hold an article, said depressed portion extending below the bottom surface of said body, a pair of hinge straps connected to said body near two of the edges, said hinge straps extending downwardly to approximately the lower surface of said depressed portion and a metallic support having journal members fitting within said straps, said journal members merging into the spaced depending leg members and said leg members in turn merging into a connecting stiffening bar.

2. A lap tray formed with a flat sheet body having a depression near one edge, the material forming said depression extending an appreciable distance below the lower surface of said body,

and a support hingedly connected with said body, said support including a rod bent at its ends to present journal members merging into leg engaging members, each of said leg engaging members having a substantially straight section and a section inclined outwardly so that the lower end of said leg engaging members in a limited sense hook under the legs of a person using the tray, said support also having a bar extending from the top of the inclined section of one leg engaging member to the top of the inclined section of the other leg engaging member so that the legs of a person using the tray will engage said bar and be spaced from said body, the material of said support being of a thickness whereby the support may be swung against the bottom of said body and not extend below the material forming said depression.

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