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C. PEASE

2,995,269

PACKAGE WITH INTERLOCKING KEYS

Filed June 7, 1960

Fig. 1.

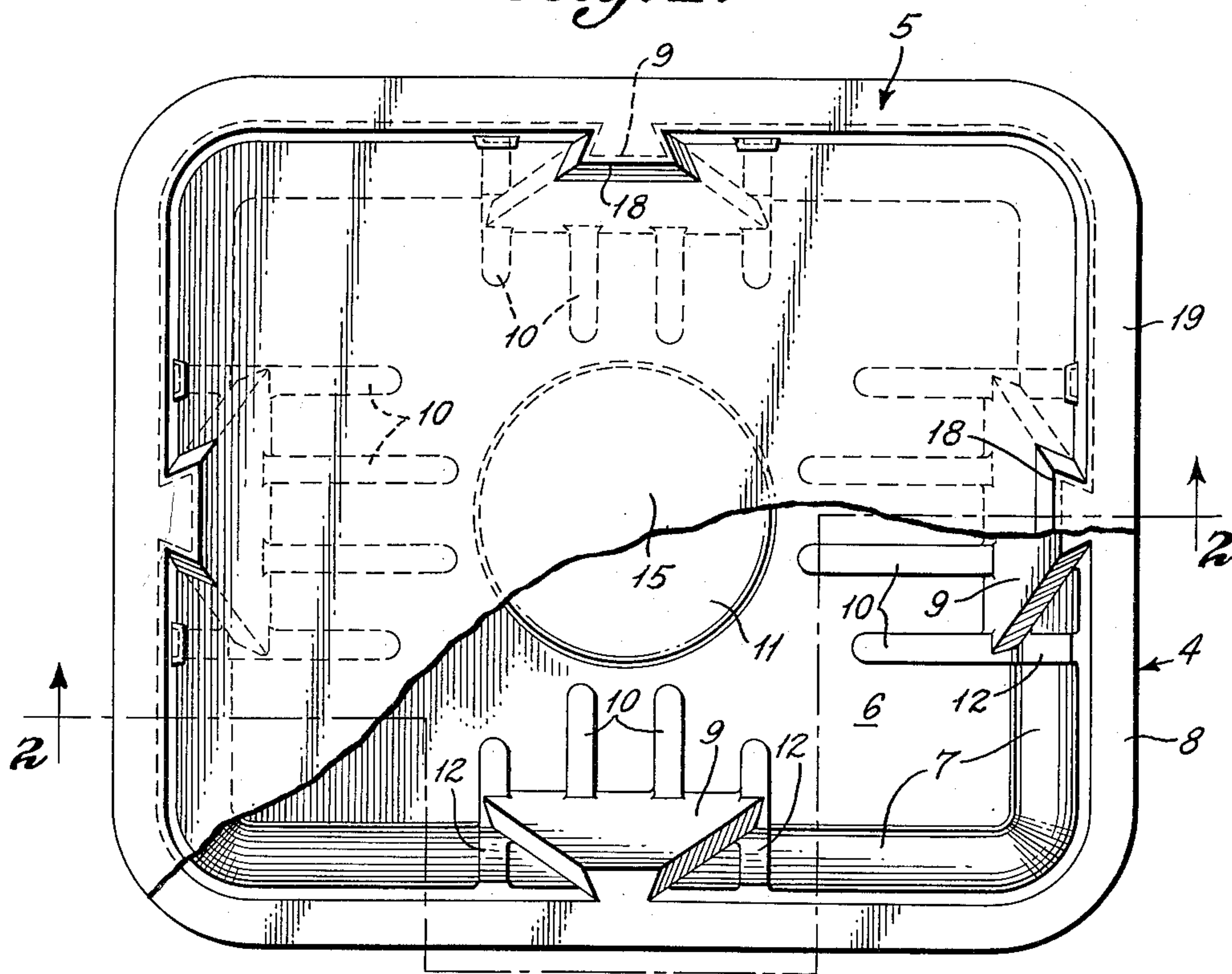


Fig. 2.

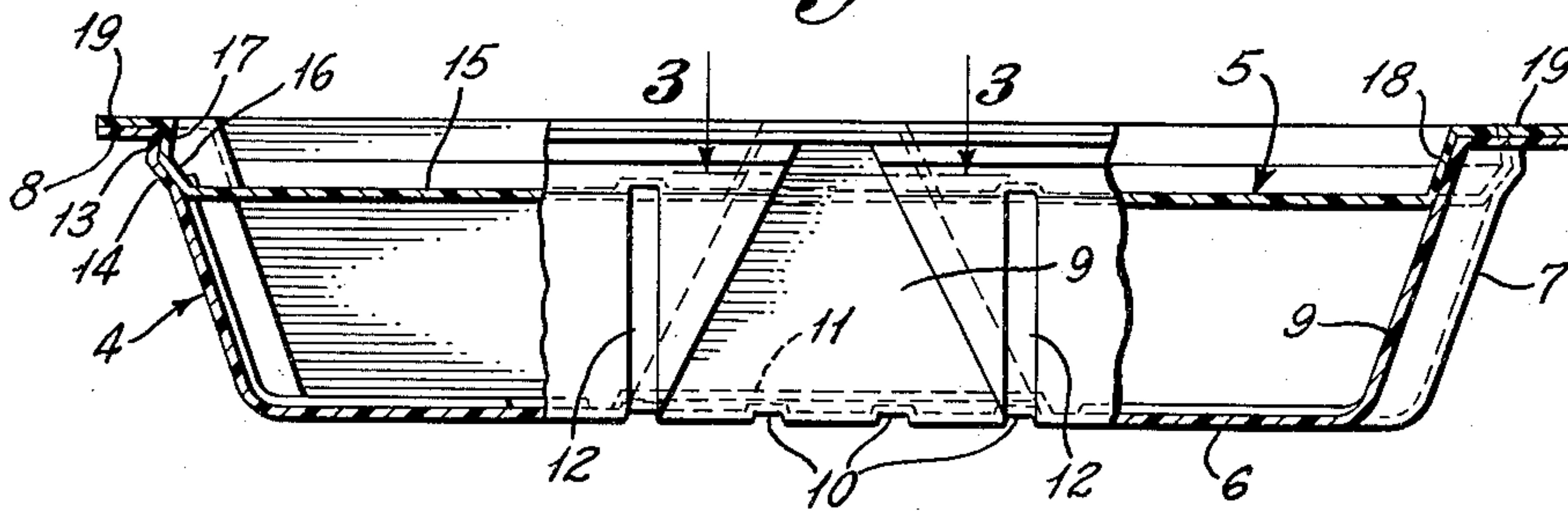
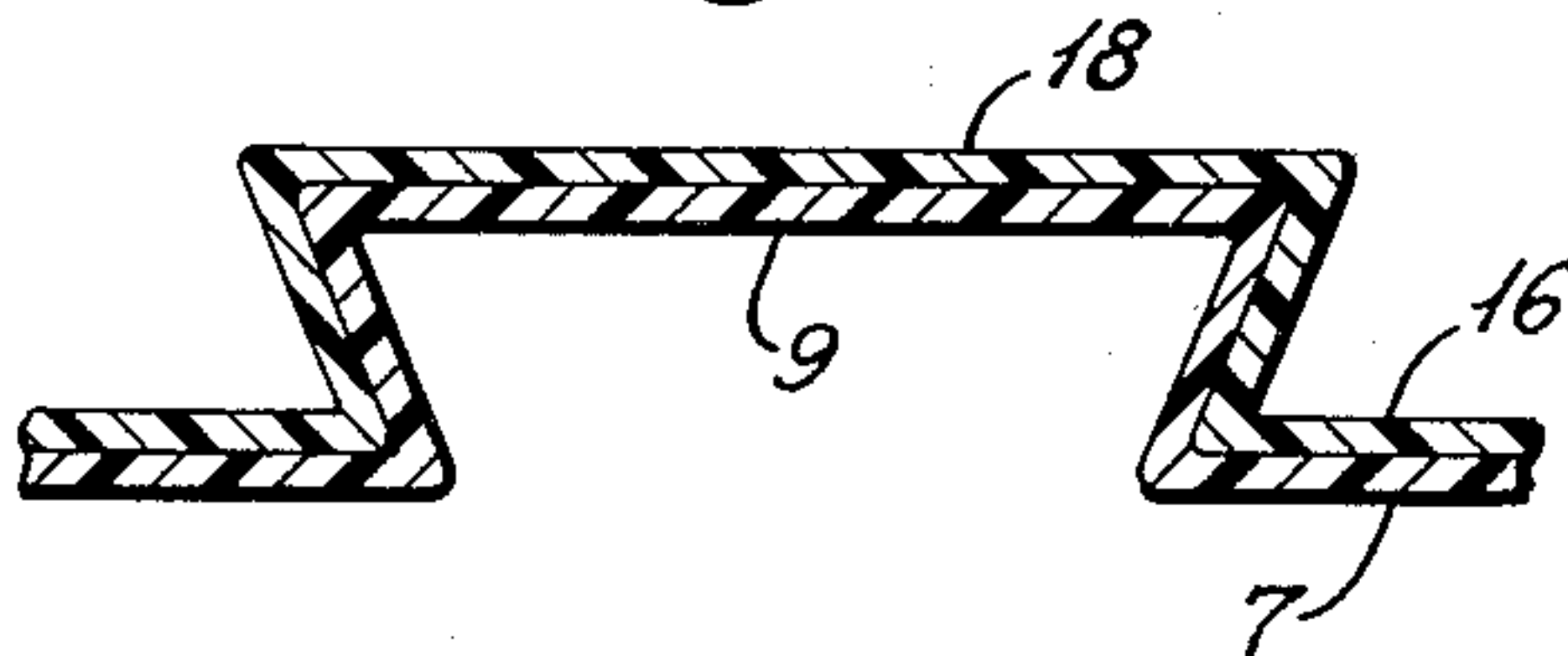


Fig. 3.



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PACKAGE WITH INTERLOCKING KEYS

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The present invention relates to a receptacle and a cover therefor provided with novel means for interlocking the cover to the receptacle. The invention is more particularly concerned with a receptacle and a cover formed of light gauge plastic material which is readily deformable. Difficulties have heretofore been experienced with receptacles and covers formed of such materials in preventing separation of the receptacle walls from the cover when there exist forces tending to cause such separation.

The receptacle of the present invention has side walls provided with tenons extending downwardly from their upper edges along the inner surfaces thereof. These tenons are of dovetail configuration in horizontal cross section. The cover telescopes into the upper end of the receptacle. The sides of the cover are provided with mortises of dovetail configuration in horizontal cross section. The mortises receive the tenons and the side walls are thus prevented from separating laterally from the edges of the cover. The receptacle and cover are preferably so constructed that the cover is snapped into position on the receptacle.

A primary object of the invention is to provide a cover and receptacle of light gauge material in which the cover is telescoped into the receptacle and the side walls of the receptacle are retained against lateral separation from the cover.

Another object of the invention is to provide a receptacle and cover of light gauge deformable material which will effectively retain its contents in spite of pressures or forces which may be applied thereto.

The foregoing and other objects and advantages of the invention will be better understood from the following description which has reference to the accompanying drawing wherein:

FIGURE 1 is a top plan view of the assembled receptacle and cover, a portion of the cover being shown broken away;

FIGURE 2 is a view partly in vertical section and partly in side elevation and taken in the direction of the arrows along the line 2-2 of FIGURE 1; and

FIGURE 3 is an enlarged sectional view taken in the direction of the arrows along the line 3-3 of FIGURE 2.

The receptacle is designated generally by the reference numeral 4 and the cover is designated generally by the reference numeral 5. The receptacle and cover are formed of light gauge plastic material which is readily deformable. The receptacle has a bottom wall 6 and side walls 7. The side walls 7 are shown flaring upwardly and outwardly from the bottom wall 6 and terminating at their upper edges in a perimetrically extending flange 8.

The side walls 7 are each provided with a tenon 9 which extends downwardly from its upper edge along the inner surface of the side wall. The tenons 9 are of dovetail configuration in horizontal cross section. The sides of the tenons preferably flare outwardly so that the tenons are wider at their lower ends than at their upper ends. The bottom wall 6 may be provided with reinforcing ribs 10 at the base of the tenons. The bottom wall 6 may also be provided with a circular raised portion 11 for reinforcing its center portion. The side walls 7 may be provided with reinforcing ribs 12 on each side of the tenons 9. The side walls 7 are flared slightly outwardly

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between the tenons 9 as indicated by the reference numeral 13 and then flare inwardly at 14 to provide a groove which is interrupted by the tenons 9.

The cover 5 is provided with a body portion composed of a wall 15 and edge walls 16 and 17. The walls 16 and 17 are provided with mortises 18 which are of dovetail configuration in horizontal cross section. The cover 5 is also provided with a flange 19 which closes the upper ends of the mortises 18. The flange 19 rests on the flange 8 when the cover is on the receptacle. Between the mortises 18, the walls 16 flare upwardly and outwardly and the walls 17 are slightly flared inwardly and upwardly. The exterior surfaces of the walls 16 and 17 thus form a ridge which is interrupted by the mortises 18. The ridge formed by the walls 16 and 17 is snapped into the groove formed by the walls 13 and 14 to thereby resist removal of the cover from the receptacle.

The sides of the mortises 18 diverge downwardly and when the cover is in position on the receptacle, the dovetail tenons 9 are received in the dovetail mortises 18 as best illustrated in FIGURE 3. This arrangement effectively prevents separation of the side walls 7 of the receptacle from the edges of the cover. The diverging side walls of the mortises 18 facilitate centering of the tenons 9 therein when the cover is telescoped into the receptacle.

It has been found that the arrangement described and illustrated in the drawing provides a lightweight, covered receptacle formed of readily deformable light gauge material which is capable of retaining its contents under conditions of shipment and use. Modifications of this preferred embodiment of the invention can be resorted to without departing from the broader concept of the invention which is defined by the claims.

Having thus described my invention, I claim:

1. A receptacle and a cover therefor comprising a receptacle having side walls provided with tenons extending downwardly from their upper edges along the inner surfaces thereof, said tenons being of dovetail configuration in horizontal cross section, a cover telescoped inside the upper end of said receptacle, said cover having mortises in its periphery, said mortises being of dovetail configuration in horizontal cross section and receiving said tenons to retain such receptacle side walls against lateral separation from said cover.

2. A deformable receptacle and a cover therefor comprising a receptacle having side walls provided with perimetrically spaced tenons extending downwardly from their upper edges along the inner surfaces thereof, said tenons being of dovetail configuration in horizontal cross section, said side walls flaring slightly outwardly and then inwardly below their upper edges between said tenons to provide a horizontal groove interrupted by said tenons, a cover telescoped inside the upper end of said receptacle, said cover having mortises in its periphery of dovetail configuration in horizontal cross section and receiving said tenons to retain such receptacle side walls against lateral separation from said cover, said cover having a horizontal ridge interrupted by said mortises and lying in said groove whereby removal of said cover is resisted.

3. A receptacle and a cover therefor, said receptacle having side walls terminating in an outwardly extending peripheral flange at their upper edges, at least one of said side walls having a tenon extending downwardly from said flange along the inner surface of such side wall, said tenon being of dovetail configuration in horizontal cross section, said cover having an outwardly extending cover flange at its marginal edges resting on said flange on said receptacle and a body portion below said cover flange telescoped within the upper end of said receptacle, a mortise extending downwardly from said cover flange along

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said body portion of said cover, said mortise being of dovetail configuration in cross section and receiving said tenon therein to retain such receptacle side wall against lateral separation from said cover.

4. A box comprising a receptacle and a cover therefor, said receptacle having side walls terminating at their upper edges in an outwardly extending peripheral flange, an upwardly and inwardly facing shoulder on the inner surfaces of said side walls below such upper edges, each of said side walls having a tenon extending downwardly from its upper edge along the inner surface thereof, said

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tenon being of dovetail configuration in horizontal cross section, said cover having a body portion arranged to telescope within the upper end of said receptacle above said shoulder and having an outwardly extending cover flange at its marginal edges resting on said flange on said receptacle, mortises extending downwardly from said cover flange along said body portion of said cover, said mortises being of dovetail configuration in cross section and receiving said tenons therein to retain such receptacle side walls against lateral separation from said cover.

No references cited.