

July 2, 1968

R. SCHNEEWEISS

3,390,810

CARRYING CASE

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4 Sheets-Sheet 1

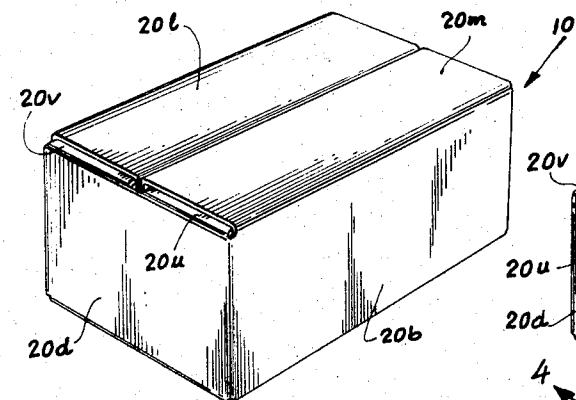


Fig. 1

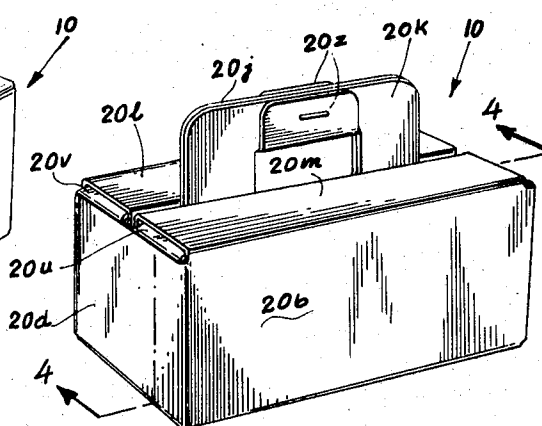


Fig. 2

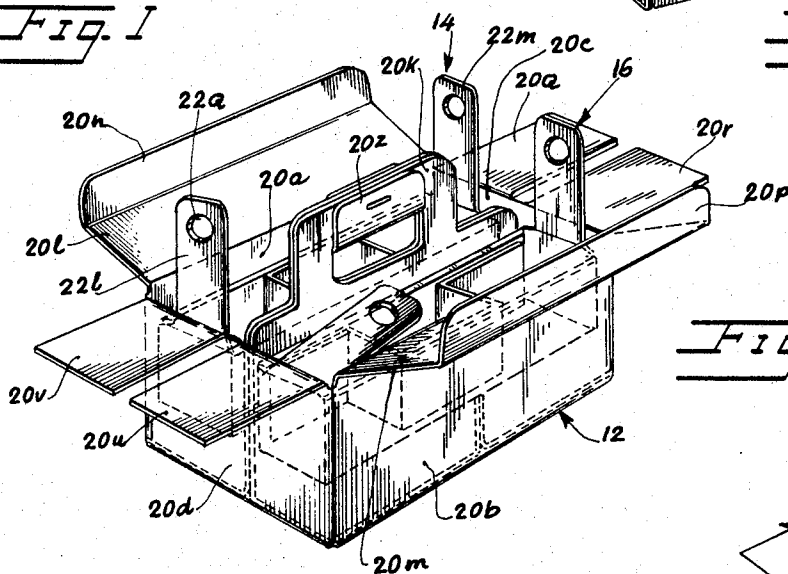


Fig. 3

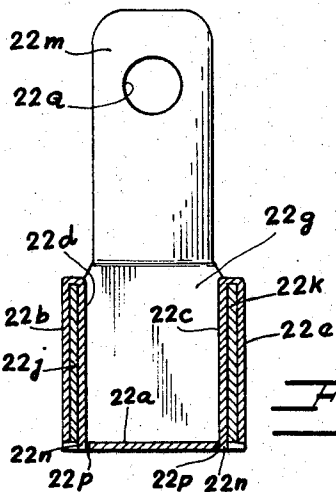


Fig. 4

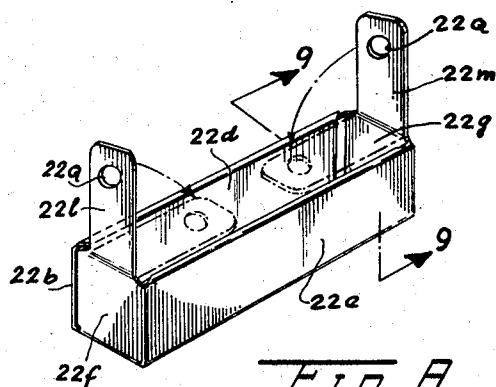


Fig. 5

INVENTOR.
RALPH SCHNEEWEISS

BY

Samuel H. H. H.

ATTORNEY

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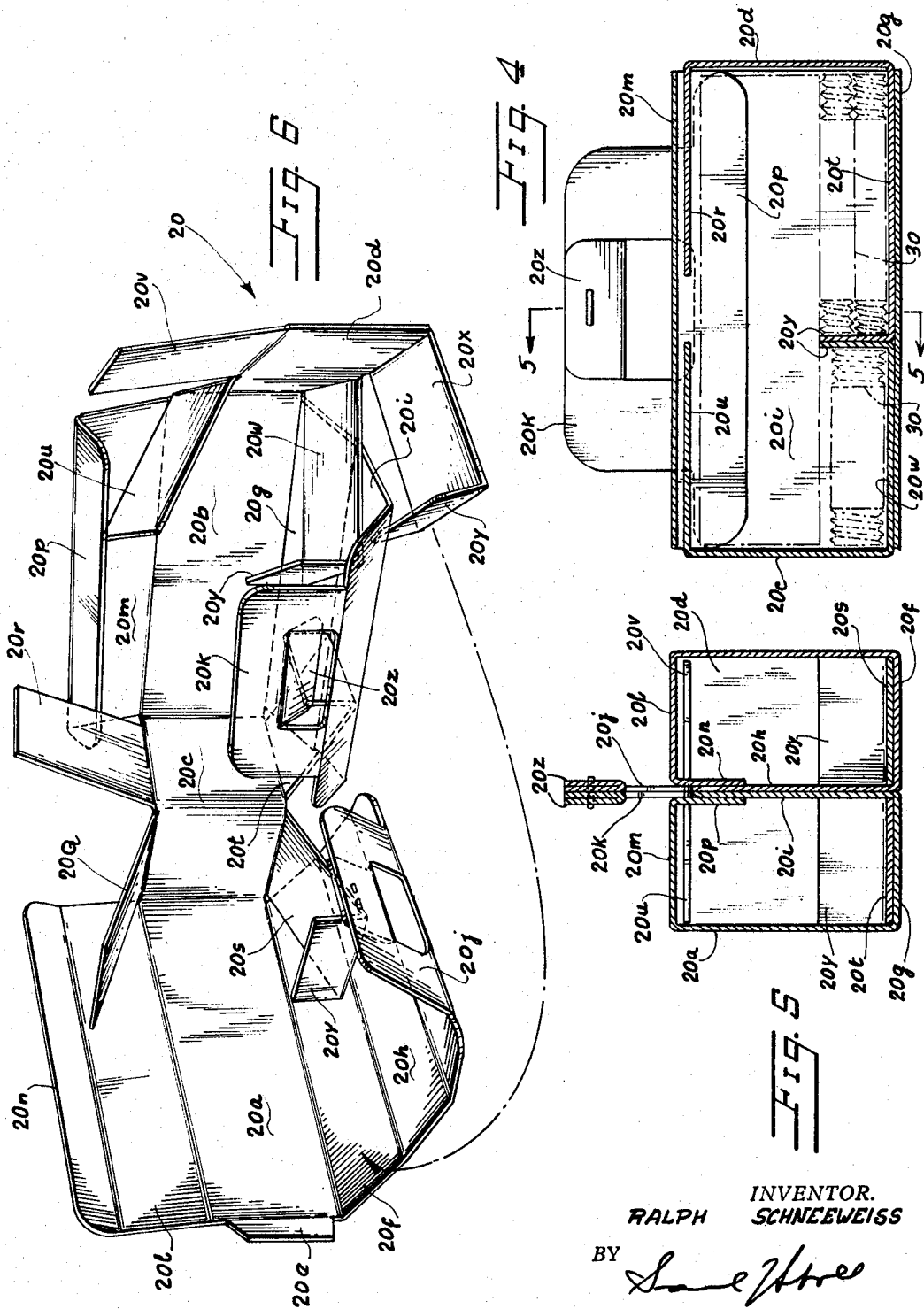
R. SCHNEEWEISS

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4 Sheets-Sheet 2



INVENTOR.
RALPH SCHNEEWEISS
BY *Ralph Schneeweiss*
ATTORNEY

July 2, 1968

R. SCHNEEWEISS

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4 Sheets-Sheet 3

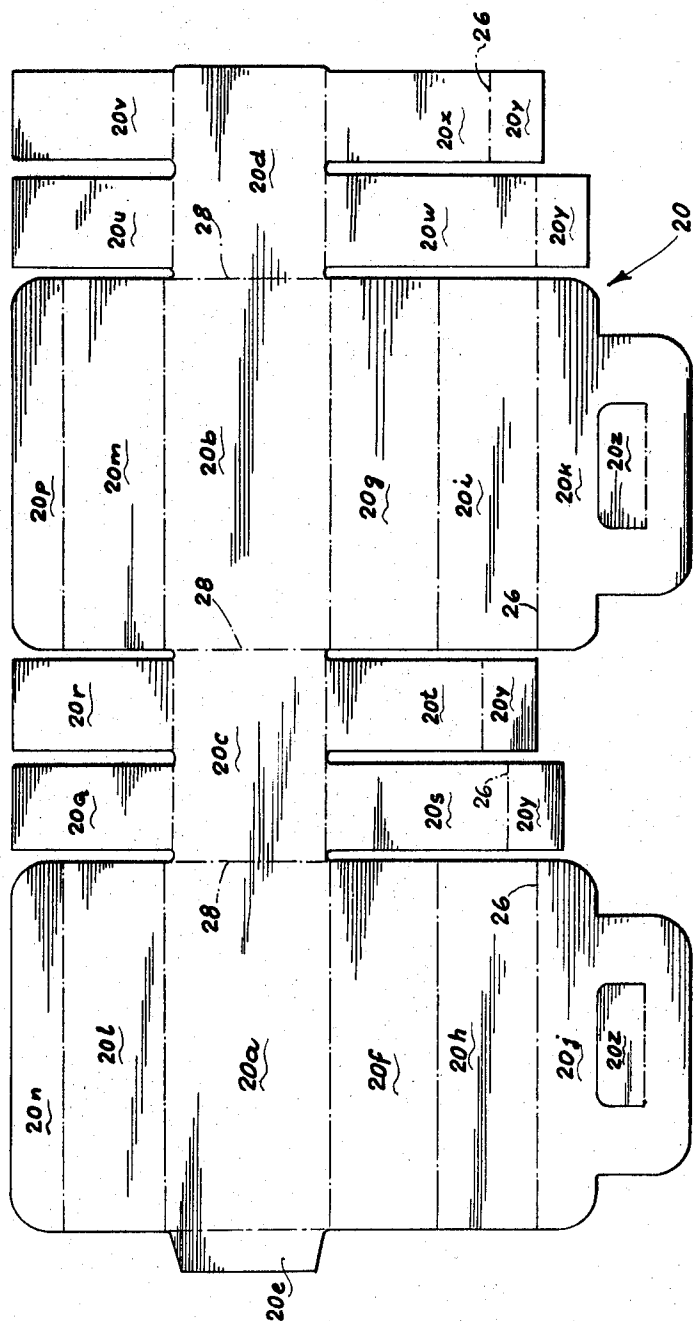


FIG. 7

RALPH SCHNEEWEISS INVENTOR.

BY

Samuel J. Stoeck

ATTORNEY

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3,390,810

CARRYING CASE

Ralph Schneeweiss, Hollywood, Fla. (% Florida Pipe & Nipple Mfg. Co., Inc., 575 W. 18th St., Hialeah, Fla., 33011)

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ABSTRACT OF THE DISCLOSURE

A combination compartmented packing and carrying case with integrally connected and mounted folding handles and a plurality of removable portable storing and carrying trays. The case has pairs of end, side, bottom and inner walls, all integral, the pair of inner walls extending upwardly from the center of the bottom of the box to form a pair of compartments and having handles formed at the tops of the inner walls.

This invention relates to a carrying case which performs the dual function of a carrying and packing case.

The principal object of this invention is the provision of a case which may be used to package merchandise of many descriptions, including plumbers' pipe nipples and fittings, mechanics' socket wrench sets, artists' supplies, jewelry and various other articles and which may also be used as a carrying case for these various and sundry items. More particularly, in the hands of the manufacturer and seller of these various items the case in which they are packed functions solely for packaging purposes; in the hands of the ultimate consumer the case serves the further function of a carrying case by which its contents may be carried from place to place.

It is accordingly an important feature of this invention to provide the combination packing and carrying case with integrally connected and mounted handles. These handles may be folded out of the way and within the case when it is to be used solely for packaging purposes; they may be extended to project outwardly from the case when it is to be used for carrying purposes.

Another important feature of this invention is the provision of a combination packing and carrying case of the character described, which contains and embodies a plurality of removable portable storing and carrying trays. These trays are designed to accommodate various products such as those above enumerated and they are provided with foldable handles corresponding, essentially, to the foldable handles of the case proper. These handles may be folded downwardly across the portable trays in order to store them within the case. The same handles may be erected so that they may be gripped between the fingers in order to lift the trays from the case.

A further object of this invention is the provision of a case and tray construction comprising a single die-cut sheet of corrugated board or the like folded and assembled in the manner shown in the drawing to form a case or a portable tray, of the character described.

Another object of this invention is the provision of a kit for pipe nipples and fittings, tools and other objects. Conventional pipe and tool kits are made of metal and they serve no other function than that of carrying kits used by plumbers, mechanics, service men and the like. In the present invention on the other hand the kit is made, preferably of corrugated board and its initial function as above indicated, is packaging. It is only when it reaches the ultimate consumer that it functions only as a carrying kit.

The invention is illustrated in the accompanying drawing in which:

FIGURE 1 is a perspective view of a combination

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packing and carrying case made in accordance with the present invention, said case being shown entirely closed for packaging use.

FIGURE 2 is a similar view but showing the handles projecting upwardly and outwardly from the case so that it may be used for carrying purposes.

FIGURE 3 is a third perspective view showing the case in open condition.

FIGURE 4 is a longitudinal section on the line 4-4 of FIGURE 2.

FIGURE 5 is a transverse section on the line 5-5 of FIGURE 4.

FIGURE 6 shows the case in a partially folded but unassembled condition.

FIGURE 7 is a plan view of the blank from which the case is made.

FIGURE 8 is a perspective view of one of the portable trays which the case contains.

FIGURE 9 is a transverse section on the line 9-9 of FIGURE 8.

FIGURE 10 is a plan view of a blank from which said portable tray is made.

FIGURE 11 is a perspective view showing the portable tray in partially folded but unassembled condition.

FIGURE 12 is a plan view of a blank from which the divider in the portable tray is made.

FIGURE 13 is a perspective view showing said divider in folded condition.

Referring now to the details of the invention as illustrated in the drawing, it will be seen that the combination packing and carrying case 10 comprises an outer case 12 and a pair of inner removable portable trays 14 and 16 respectively. It will be observed in FIGURES 6 and 7 that the outer case 12 is made of a single die-cut blank 20 and it will be noted from FIGURES 10 and 11 that each portable tray is also made from a single die-cut blank 22. Similarly each portable tray is provided with a divider 18 which is made of a single blank 24. It will of course be understood that the particular shape, proportions and dimensions of the various blanks which are used in connection with this invention may be varied in accordance with individual requirements. The particular size, shape and proportion shown in the drawing is clearly illustrative. Similarly the material of which these blanks are made may be varied in accordance with individual requirements. Thus, although corrugated board is preferred for certain purposes, serving, for example, the needs of a plumber's pipe nipple and fitting kit, other materials may be used to suit other requirements. By the same token, the corrugated board (or other sheet material) may be covered with other material or may remain uncovered, depending upon the purposes for which the case is to be used and the nature of the articles which it is to accommodate. As a jewelry kit, for example, the case would desirably be covered on the outside with a decorative material, such as embossed and padded sheet plastics, and on the inside with a padded velvet type of fabric.

Referring to the outer case 12 and to the blank 20 from which it is made, it will be observed that said blank is provided with the following panels which are either die-cut from each other or separated by means of scored fold lines or both: a pair of spaced side panels 20a and 20b, a pair of spaced end panels 20c and 20d, connected to said side panels, an attaching flap 20e connected to side panel 20a for attaching said side panel to end panel 20d, a pair of bottom panels 20f and 20g connected, respectively, to said side panels 20a and 20b, a pair of inner wall members 20h and 20i connected to said bottom panels 20f and 20g, a pair of handle portions 20j and 20k connected to said inner wall panels 20h and 20i, a pair of cover panels 20l and 20m connected, respectively, to side

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panels 20a and 20b on the opposite side thereof from bottom panels 20f and 20g, a pair of closure flaps 20n and 20p connected to said cover panels 20l and 20m, a pair of closure flaps 20q and 20r connected to end panel 20c on one side thereof, a pair of secondary bottom panels 20s and 20t connected to said end panel 20c on the opposite side thereof, a second pair of closure flaps 20u and 20v connected to one side of end panel 20d and a second pair of secondary bottom panels 20w and 20x connected to said end panel 20d on the opposite side thereof, secondary bottom panels 20s, 20t, 20w and 20x being each provided with a flap portion 20y for a purpose which will shortly be explained. Similarly handle portions 20j and 20k are provided with flap portion 20z whose function will also be explained. Interrupted lines 26 represent horizontal score lines along which a folding operation may take place while interrupted lines 28 represent vertical score lines.

The manner in which blank 20 may be folded and assembled is indicated in FIGURES 6 and 3. Panels 20a, 20c, 20b and 20d form the vertical sides and end of the container. Panels 20f and 20g form the bottom wall of the container and panels 20h and 20i project upwardly from said bottom walls through the center of the container to form a pair of inner adjacent walls therein defining a pair of compartments on opposite sides thereof. Across bottom walls 20f and 20g are disposed secondary bottom panels 20s, 20t, 20w and 20x. Their respective end portion 20y are folded upwardly to provide a vertical partition as well as a support for the portable tray which is to be placed in that particular compartment of the case.

Panels 20q, 20r, 20u and 20v are folded across the top of the case and then upon them are folded cover panels 20l and 20m. Flaps 20n and 20p are then tucked inwardly into the case in order to lock covers 20l and 20m in closed positions. Handle portions 20j and 20k may either be folded across the top of the case, to produce the closed end result shown in FIGURE 1 or they may project upwardly from the case to form the carrying kit shown in FIGURE 2. In this connection it will be noted that flaps 20z may be folded upwardly flat against the upper portions of the handles (as shown in FIGURES 4 and 5) where they may be stapled or otherwise fastened in place. This provides a stronger, more comfortable handle.

Considering now the construction of portable trays 14 and 16, it will be seen that each is made of a single blank 22 comprising the following components: a bottom panel 22a, a pair of outside panels 22b and 22c connected to opposite sides of said bottom panel 22a, a pair of inner side panels 22d and 22e connected to outer side panels 22b and 22c, a pair of end panels 22f and 22g connected to the ends of bottom panel 22a, a pair of side flaps 22h and 22i connected to opposite sides of end panel 22f, a similar pair of side flaps 22j and 22k connected to opposite sides of end panel 22g and a pair of handle portions 22l and 22m connected to end panels 22f and 22g.

In the assembly of this blank 22 panels 22b and 22c are folded upwardly from bottom panel 22a to form outer sides of the tray and panels 22d and 22e are then folded inwardly to form the inner sides of the tray, and flaps 22h, 22i, 22j and 22k are inserted between said inner and outer sides. Additionally tabs 22n on inner sides 22d and 22e are caused to project on slots 22p formed along the side edge of bottom panel 22a. The several parts of the tray are now securely locked in position. However, when divider 18 is inserted into the tray as shown in FIGURE 3 it serves as an abutment between the two inner sides 22d and 22e to prevent accidental dislodgment of their respective tabs 22n from slots 22p. Thus divider 18 serves the dual function of dividing the tray into a plurality of compartments and also strengthening its structure.

As shown in FIGURES 12 and 13 a typical blank 24 may be used to form divider 18. Depending upon indi-

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vidual requirements blank 24 may be provided with various panels 24a, 24b, 24c, 24d, 24e, 24f and 24g. These panels are of course separated by scored lines along which folding operations may take place to convert the blank from its two dimensional form in FIGURE 12 to its three dimensional form in FIGURE 13.

Portable trays 14 and 16 may be placed in the two side compartment of the case upon supports represented by flaps 29v. When it is desired to close the case either as shown in FIGURE 1 or as shown in FIGURE 2, handles 22l and 22m of the two trays are folded downwardly into horizontal positions as shown in FIGURES 4 and 5. When it is desired to remove the trays from the case said handles are raised to vertical positions as shown in FIGURE 3. Each such handle is provided with a finger opening 22q which may be engaged by a finger to remove the tray from the case.

FIGURE 4 illustrates the use of the case in connection with pipes 30. These pipes occupy the compartments which are defined by the side and end walls of the case, the inner walls thereof and flaps 20y. The space above these compartments is occupied by the two trays and whatever pipe nipples or fittings may be placed therein.

The foregoing is illustrative of a preferred form of this invention and it will be understood that this preferred form may be modified and other forms may be provided within the broad scope of the appended claims.

What is claimed is:

1. A carrying case of the character described, comprising a box having a pair of end walls, a pair of side walls integral with said end walls and extending laterally therefrom, a pair of bottom walls integral with the lower ends of said side walls and extending horizontally therefrom to the center of the box, a pair of inner walls integral with said bottom walls and extending upwardly therefrom in the center of the box to form a pair of compartments on opposite sides of said inner walls, handle portions formed on said inner walls for carrying the box, and a pair of cover flaps integral with the upper ends of said side walls to close the box, the handle portions being foldable into horizontal positions under the cover flaps, said cover flaps being provided with downwardly projecting extension pieces adapted for insertion between the inner walls to hold said cover flaps in closed position, a pair of additional bottom walls being provided on each of the end walls, said additional bottom walls being integral with the lower ends of said end walls and extending horizontally therefrom on opposite sides of the inner walls across the first mentioned bottom walls, a pair of portable trays being removably mounted within the compartments formed on opposite sides of the inner walls, upwardly extending flaps being formed on the inner ends of the additional bottom walls integrally therewith, said upwardly extending flaps serving as supports for the portable trays to support them in elevated positions within the box.

2. A carrying case of the character described, comprising a box having a pair of end walls, a pair of side walls integral with said end walls and extending laterally therefrom, a pair of bottom walls integral with the lower ends of said side walls and extending horizontally therefrom to the center of the box, a pair of inner walls integral with said bottom walls and extending upwardly therefrom in the center of the box to form a pair of compartments on opposite sides of said inner walls, handle portions formed on said inner walls for carrying the box, and a pair of cover flaps integral with the upper ends of said side walls to close the box, the handle portions being foldable into horizontal positions under the cover flaps, said cover flaps being provided with downwardly projecting extension pieces adapted for insertion between the inner walls to hold said cover flaps in closed position, a pair of additional bottom walls being provided on each of the end walls, said additional bottom walls being integral with the lower ends of said end walls and extend-

ing horizontally therefrom on opposite sides of the inner walls across the first mentioned bottom walls, a pair of portable trays being removably mounted within the compartments formed on opposite sides of the inner walls, each portable tray being provided with bottom, side and end walls which are all integral with each other, and a pair of handle portions extending upwardly from said end walls for carrying purposes, said handle portions being foldable downwardly into horizontal positions under the cover flaps.

3. The combination of claim 2, wherein dividers are

provided within each portable tray to form a plurality of compartments therein.

References Cited

UNITED STATES PATENTS

1,882,524	10/1932	Sherman	229—52
2,006,725	7/1935	Usinger	220—115
2,529,675	11/1950	Brulin	220—115
2,785,846	3/1957	Weiner	229—52

DAVID M. BOCKENEK, *Primary Examiner*.