Jan. 3, 1928. 1,655,071

F. S. OPPENHEIM

CONTAINER

Filed Dec. 17, 1924

Fig. 1

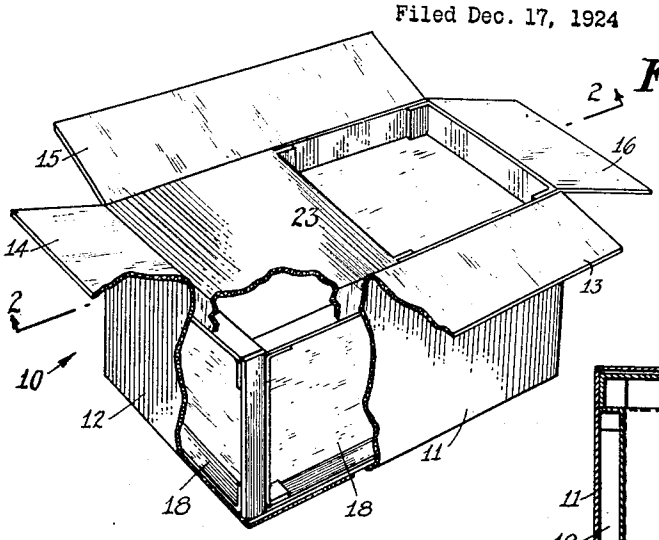



Fig. 2

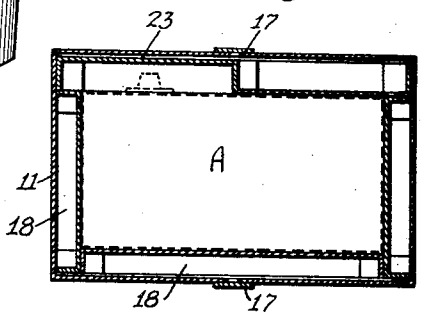



Fig. 5

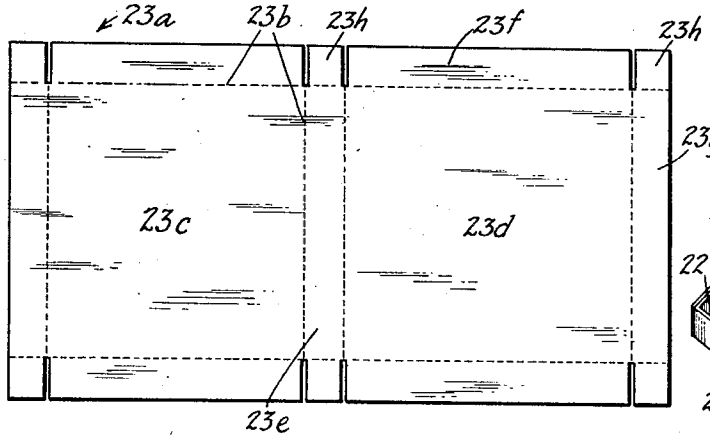



Fig. 3

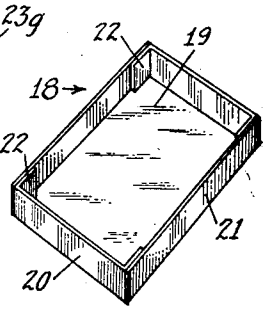
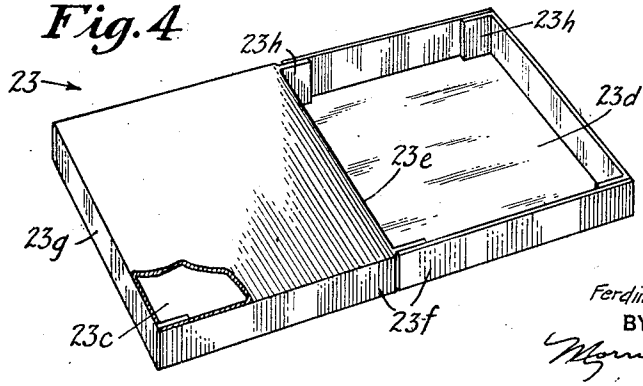



Fig. 4




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# UNITED STATES PATENT OFFICE.

FERDINAND S. OPPENHEIM, OF NEW YORK, N. Y.

## CONTAINER.

Application filed December 17, 1924. Serial No. 756,458.

This invention relates to packing and shipping boxes and cases and more particularly it is directed to a cushioning member of improved construction made of corrugated paper or the like material for use in packing and shipping delicate apparatus such as radio sets, meters, typewriters and the like in containers or cartons.

An object of the invention is to provide an improved container or carton of the character described having substantially braced inner walls which effectively protect and cushion the enclosed contents from sudden blows and contact so as to prevent injury and damage due to careless and rough handling during transportation.

Another object of the invention is to provide a packing and shipping box of the character described having an improved form of cushioning member which is particularly adapted to receive apparatus having projecting parts and is constructed to accommodate and protect such projecting parts.

A further object of the invention is to provide an improved container or carton of the character described which is constructed of few and simple parts, inexpensive to manufacture and practical and efficient to a high degree for the purposes specified.

Other objects of this invention will in part be obvious and in part hereinafter pointed out.

Certain features herein shown and described are shown, described and claimed in my Patent #1,522,902 granted January 13, 1925 and accordingly are not claimed herein.

With the above exception, the invention accordingly consists in the features of construction, combinations of elements and arrangements of parts which will be exemplified in the construction hereinafter described and of which the scope of application will be indicated in the following claims.

In the accompanying drawing, in which is shown one of the various possible illustrative embodiments of this invention,

Fig. 1 is a perspective view showing a packing and shipping box embodying the invention, parts of the box being broken away to show the interior;

Fig. 2 is a cross sectional view taken on line 2—2 in Fig. 1 showing the box closed and sealed with a radio set (shown in dot and dash lines) packed therein;

Fig. 3 is a perspective view of a side cushioning member or partition liner;

Fig. 4 is a perspective view of the top cushioning member; and

Fig. 5 is a plan view of the blank from which the top cushioning member shown in Fig. 4 is formed.

Referring in detail to the drawing, 10 denotes the outer casing or shell of a packing and shipping box embodying the invention which may have any desired shape or design and may be made of fibre board, card board or the like material but is preferably constructed of corrugated paper board, the cellular structure of which has been found to add greatly to the cushioning effect for the purposes described.

As seen in Fig. 1, the outer casing 10 is of collapsible construction and comprises elongated side walls 11, end walls 12 and cover flaps 13, 14, 15, and 16, all preferably formed from a single sheet of material, cut, creased and folded to form the rectangular shaped shell 10, the cover flaps being adapted to fold inwardly to form the top and bottom walls for closing the casing. When the flaps are folded into their closed position, they may be held in place by any suitable means, as for example a strip of adhesive tape 17.

The box 10 may be provided with an interior cushioning means of any suitable construction, said means being formed as a unitary structure or comprising separate partition liners or cushioning members 18 which may be arranged against the side walls, end walls and bottom, as shown in Fig. 2. These members 18 may be substantially identical in construction. As will be seen most clearly from Fig. 3, each is preferably formed of a single sheet of corrugated paper board cut, creased and folded to form a rectangular shaped body portion 19, end walls 20 and side walls 21, said side walls 21 having flap extensions 22 which are bent to extend within and adjacent the end walls 20 and held in position by suitable fastening means. The flap extensions 22 or other fastenings for the side and end walls to retain them in their relative positions may be omitted if desired, since it is apparent that when the members 18 are assembled within the casing 10 the structure is self-retaining. (See Fig. 2.)

It will be understood that the shipping box is of suitable dimensions to enable packing the article or articles therein so as to substantially fill the space marked A in Fig. 2, and that the partition liners 18 are of proper design to completely cover the interior sides and bottom of the casing 10 to the height of the contents, said liners 18 and contents preferably extending a substantial distance below the top of the casing for the purposes which will hereinafter appear.

A dominant feature of the invention is to provide a top cushioning member of novel construction which is adapted to accommodate and protect projecting parts of apparatus packed in the box 10. For example, where the contents occupying space A (see Fig. 2) comprise a radio set having the usual series of dials, levers, and other like control means, which project beyond its enclosing cabinet, a top cushioning member 23 may be provided which accommodates the said projecting parts and which acts to support and space the set from the top cover of the casing.

As will be seen from the drawings, the top cushioning member 23 is preferably made of a single sheet of corrugated paper board cut to form the blank $23^a$ and provided with crease lines $23^b$ as shown in Fig. 5. The blank $23^a$ may be folded to form the structure shown in Fig. 4 which comprises adjoining rectangular shaped recessed portions $23^c$ and $23^d$ extending down from opposite sides of the member 23 and separated by transversely extending wall portion $23^e$, side walls $23^f$, and end walls $23^g$. Flap extensions $23^h$ on wall portion $23^e$ and end wall $23^g$ are preferably bent to extend within and adjacent the side walls $23^f$ to reinforce the folded structure. If desired, suitable fastening means may be provided for retaining the flap extensions $23^h$ in their relative folded position, or the said flap extensions may be omitted as it is apparent that the cushioning member 23 structure is self-retaining when it is assembled within casing 10. (See Figs. 1 and 2.)

In the practice of the invention, the side and end partition liners 18 are first placed in position in casing 10 and are held in their respective places by means of the bottom liner 18, as is clearly shown in Figs. 1 and 2. Having arranged these liners in position with their body portions spaced inwardly from the various walls of the casing, the radio set or other article to be packed is then lowered into place, the side wall of the set abutting against the walls of the liner 18 and being spaced thereby a substantial distance from the walls of the casing 10. With these parts in position, the cushioning member 23 which is dimensioned to the proper length, width and height to fill the space between the top of the set and the casing, is inserted in the top opening of the casing with the recessed portion $23^c$ arranged to enclose the projecting parts, the adjoining recessed portion $23^d$ being positioned to form a substantial bracing cushion for the remaining portion of the apparatus.

The cover flaps are then folded into position and the casing sealed in any suitable manner as by means of a strip of adhesive tape 17.

It will thus be seen that there is provided a device in which the several objects of this invention are achieved and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiment above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawing is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. A packing and shipping box adapted to support contents packed therein in spaced relation to the side, bottom and top walls thereof having at least one cushioning member formed with a plurality of adjoining recessed portions, said portions having bottoms extending in non-intersecting planes and aligned side walls extending in relatively opposite directions with respect to one of said planes, one of said recessed portions adapted when positioned in the box to accommodate projecting parts of said contents.

2. A packing and shipping box adapted to support contents packed therein in spaced relation to the side, bottom and top walls thereof having at least one cushioning member formed with a plurality of adjoining recessed portions each of said portions having a bottom, said bottoms extending in parallel planes, one of said recessed portions adapted when positioned in the box to accommodate projecting parts of said contents, another recessed portion adapted to abut the contents, said member forming a substantial bracing cushion to support and space said contents from one wall of the casing.

3. In a packing and shipping box a cushioning member constructed of a single sheet of material creased and folded to have adjoining rectangular shaped recessed portions each having end walls and side walls extending downwardly from opposite sides of said member, said recessed portions being selectively adapted to accommodate projecting portions of the contents packed in said box,

said recessed portions having side and end walls forming a cushioning structure for supporting and spacing said contents from one wall of the casing.

4. In a packing and shipping box a cushioning member constructed of a single sheet of material creased and folded to have adjoining rectangular shaped recessed portions each having end walls and side walls extending downwardly from opposite sides of said member, said recessed portions being selectively adapted to accommodate projecting portions of the contents packed in said box, said recessed portions being separated by a wall extending transversely of said member to form part of the cushioning structure for supporting and spacing said contents from one wall of the casing.

5. In a packing and shipping box a cushioning member constructed of a single sheet of material creased and folded to have adjoining rectangular shaped recessed portions, portions of each of the marginal edges of said sheet being bent to extend in opposite directions with respect to one side of said member to form the side walls of a cushioning structure adapted to support and space the contents from one wall of the casing.

6. In a packing and shipping box, a cushioning member constructed of a single sheet of material creased and folded with the opposite marginal end edges of said sheet being bent one upwardly and the other downwardly relative to one side of said sheet, and portions of each of the marginal side edges being bent one upwardly and the other downwardly corresponding to said end edges to form adjoining rectangular shaped recesses as and for the purpose described and specified.

In testimony whereof I affix my signature.

FERDINAND S. OPPENHEIM.