Nov. 6, 1928. 1,690,824

M. R. KONDOLF

CONTAINER

Filed March 27, 1925

Fig. 1.

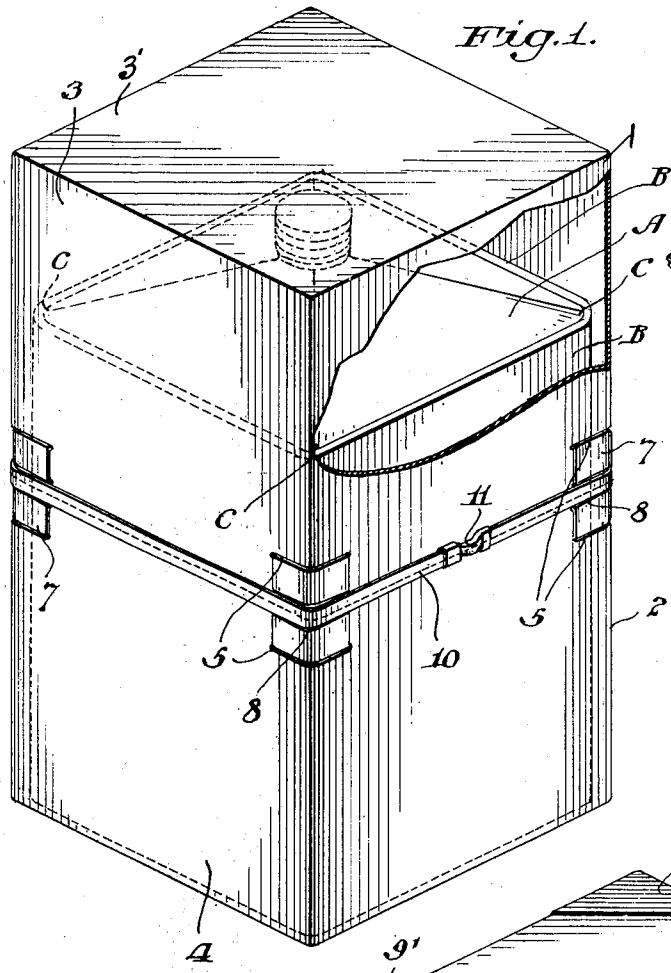
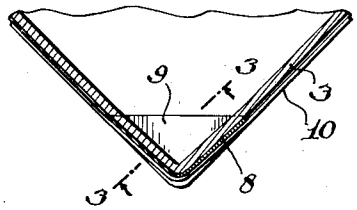


Fig. 2.



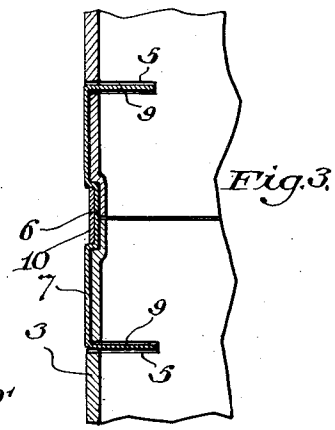
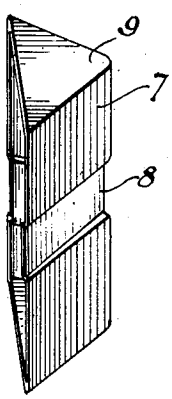


Fig. 3.

Fig. 4.



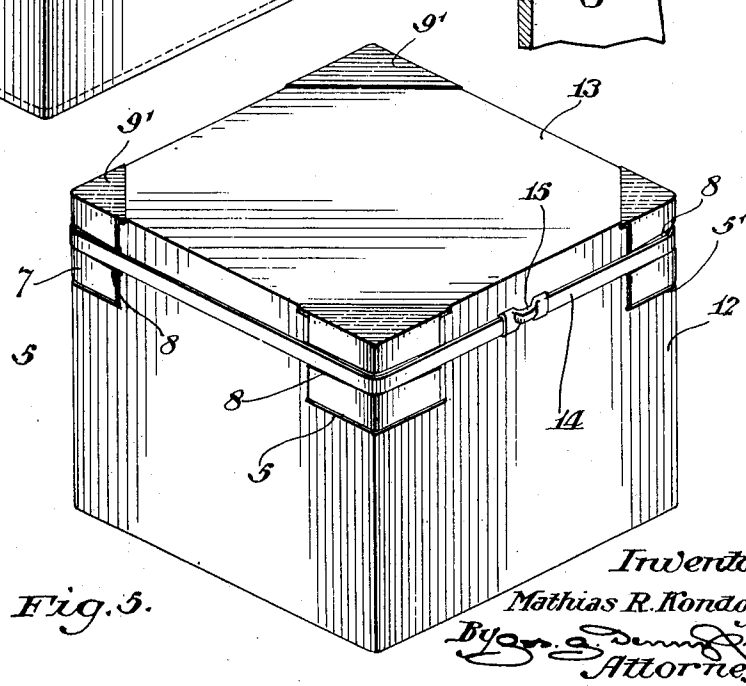


Fig. 5.

Inventor:
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Patented Nov. 6, 1928. 1,690,824

UNITED STATES PATENT OFFICE.

MATHIAS R. KONDOLF, OF CYNWYD, PENNSYLVANIA, ASSIGNOR TO BOXBOARD PRODUCTS COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF DELAWARE.

CONTAINER.

Application filed March 27, 1925. Serial No. 18,748.

My invention is designed primarily to provide a container comprising a plurality of cartons or receptacles which may be telescoped over opposite ends of a vessel or package and have their edges secured together in abutting or adjacent relation, to form a strong and rigid joint, by easily applied and quickly detachable fastening means. Such fastening means preferably consist of a plurality of clips each having thereon spaced devices for engaging respectively the relatively movable parts of the container. The clips are secured in position by a girth or binder which holds the fasteners adjacent to the container walls. My improved fastening means are also adapted for securing a cover or closure on or in one or more ends of a case or body, or for securing together the adjacent or abutting ends of any two bodies.

In the shipment of fluids, such as oil, in sheet metal cans, it is important to prevent bulging or vibration of the metallic walls, as well as to afford protection thereto from knocks and blows. My improved container provides a snug fitting casing for such vessels which may be readily slipped thereon or thereoff and which protects and reenforces the walls thereof. The container sections are securely held in place on the can by fasteners having tongues engaging the respective separable parts, the fasteners being confined by a girth or binder which holds the tongues in engaging position and supplements the inherent resistance to bulging of the container walls. Preferably the fasteners consist of trough shaped clips having ends which engage in slots formed in corners of the container walls and are retained therein by a band or keeper engaging the bodies of the clips and surrounding the container adjacent the joint therein.

The characteristic features and advantages of my improvements will more fully appear from the following description and the accompanying drawings in illustration thereof.

In the drawings, Fig. 1 is a broken perspective view showing a vessel housed in a container embodying my improvements; Fig. 2 is a fragmentary sectional view of the container shown in Fig. 1; Fig. 3 is a sectional view on the line 3—3 of Fig. 2; Fig. 4 is a perspective view of a detached fastening clip; and Fig. 5 is a perspective view illustrating the application of my invention to securing a flat closure on a container.

In Fig. 1 of the drawings there is shown a usual form of oil can A having flat sides B connected by rounded corners C and housed within a container formed by the cartons 1 and 2 which have flat sides 3 and 4 conforming with the sides B of the can A. Each carton has an integral head 3′ closing one end thereof and is preferably formed of pulp board or paper board chemically treated to give rigidity to the walls thereof.

Each carton has its corners slotted by saw kerfs 5 and the stock adjacent to the free edges of such corners may be recessed or cut away as indicated at 6.

The cartons are held together by fasteners 7 preferably stamped out from sheet metal and having angularly disposed body walls containing grooves 8 of gradually increasing depth from the edges of the walls to their points of juncture. End flanges 9, bent over at right angles to the body walls, form tongues or fins which enter the slots 5 and the ridges formed by the grooves 8 are seated in the recesses 6. A strap or wire 10, seated in the grooves 8 of the fasteners 7, is drawn taut and has its ends sealed by a clamp 11 so that the fastener bodies are drawn tightly against the walls of the container to form corner guards preventing torsional twisting of the container sections about their common axis. The flanges 9 are engaged in the slots 5 so that the separation of the sections 1 and 2 is prevented, and the joint between such sections is covered by the strap 10. The girth may if desired be made integral with the fasteners or welded or riveted thereto.

A vessel so housed is completely protected over its entire surface and the bulging or bursting of its walls due to surging of its contents is effectually prevented. Any torsional or twisting strain tending to rotate one section relatively to the other is resisted by the angular webs of the corner pieces, any strain applied to break the joint between the container sections is distributed by the fasteners over a comparatively extended wall area and an efficient fastening together of the container sections is effected which cannot be disrupted even by rough usage. But by freeing the ends of or cutting the band 10, the fastener tongues 9 may be readily removed

from the slots 5 and the container sections separated without injury thereto. The cartons may be again assembled into closed containers or used as open receptacles.

In Fig. 5, I have illustrated the application of my improved fastening means to a receptacle 12 and cover 13. In this construction, the slots 5 are formed in the receptacle corners at a distance below the top of the cover equal to the distance between the fastener flanges 9 and 9', the latter preferably having a broad surface affording an extended bearing on the cover. The band or girth 14 is drawn taut in the grooves 8 of the fasteners and has its ends secured by a clamp 15 to prevent dislodgment of any of the fasteners.

It will be understood that the fastening clips may be of many forms and may be secured in position in many ways without departing from the scope of my invention; the form and application of the invention heretofore described being a preferred embodiment but susceptible of wide modification to suit various containers and conditions of use.

Having described my invention, I claim:

1. A shipping container comprising hollow receptacles having walls of non-metal material and having the free edges of said receptacles adjacent to each other, means comprising spaced devices located at intervals along said edges and a band which when taut secures said devices against dislodgment, said devices when in position preventing disengagement of said receptacles and being readily separable therefrom when said band is slack.

2. A shipping container having a plurality of members comprising a receptacle and a closure therefor, means comprising spaced devices engaging the walls of said members to prevent separation of said members and a girth fastener surrounding a plane parallel with the plane of the edges of said closure and encircling said container and which when taut prevents dislodgment of said devices and when slack permits disengagement thereof.

3. A container comprising a hollow receptacle and a closure therefor, corner engaging clips having angularly disposed body walls and flanges turned over from the end of and extending transversely to said body walls and engaging said members and a band which when taut prevents dislodgment of said clips and when slack permits ready disengagement thereof.

4. A package comprising a metallic container, receptacles having paper board walls telescoped over the opposite ends of said container and substantially conforming with the contour of the side walls thereof, said receptacles having adjacent edges and each having an end which is non-detachable from the receptacle from the exterior thereof, the joint between the receptacles being intermediate the ends of the container side walls and reenforced thereby, detachable, means comprising angular corner pieces engaging the walls of said receptacles at the corners thereof and overlapping adjacent edges of the respective receptacles, and a band encircling said package, to hold said reinforcing means in position.

5. The combination of members comprising a hollow receptacle and a closure therefor, of corner engaging clips having concave trough-shaped bodies with flanges extending transversely to the concave surfaces of said bodies and engaging said members, said clips being held against dislodgment by a band drawn taut on the receptacle along a line substantially parallel with the joint between the members secured by said clip.

6. The combination with a plurality of cartons, of corner engaging clips having angularly disposed body members and members extending transversely to said body members and engaged in the cartons, and means drawn taut to secure said clips in engagement with the walls of said cartons.

7. The combination of a plurality of receptacles having abutting edges and containing recesses adjacent to said edges, fasteners overlapping the joint between said edges and having wings engaging the walls of said recesses, and a taut band extending from one to another of said fasteners and securing them against dislodgment.

8. A container fastener comprising a trough shaped device having spaced members projecting from the concave face thereof and forming webs connecting angular walls of said device for the engagement of container parts and band retaining means on the convex face thereof and disposed between the planes of said members first named.

9. A shipping container comprising a pair of hardened fibreboard boxes of substantially equal dimensions and each having sides, ends and bottom integral and continuous without joints, seams or openings, the boxes being inverted with relation to each other and having their open end edges adjacent, corner pieces at the corners of the container and each overlapping the joint between and engaging both boxes, said corner pieces comprising angularly disposed body walls and flanges extending transversely to said body walls, and a band surrounding said containers and firmly holding said corner pieces in place when taut and said corner pieces being readily detachable when said band is slack.

In testimony whereof I have hereunto set my name this 25th day of March, 1925.

MATHIAS R. KONDOLF.