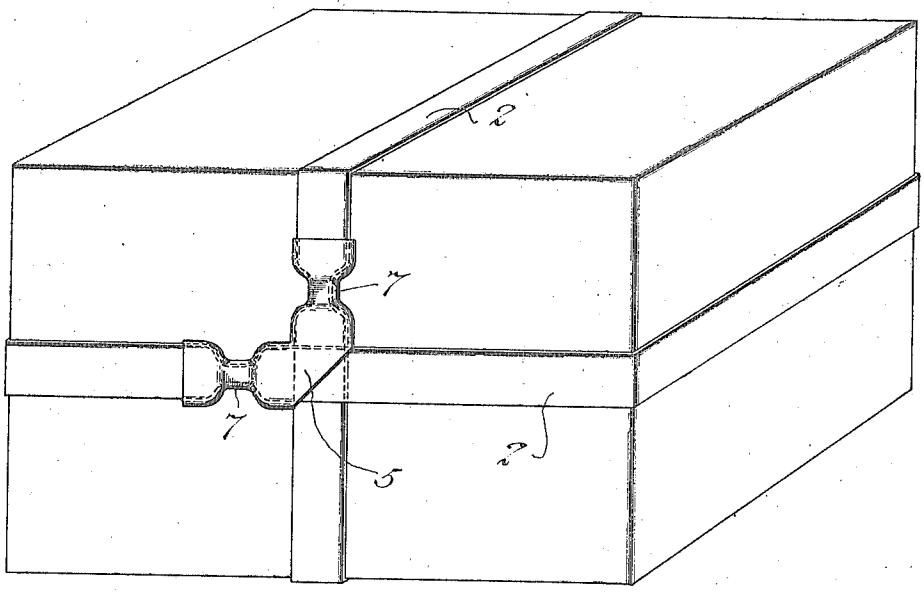
Feb. 20, 1923. 1,445,630

J. W. LESLIE

DEVICE FOR RENDERING PACKAGES, BOXES, ETC., PILFER PROOF

Filed July 8, 1921

Fig. 1



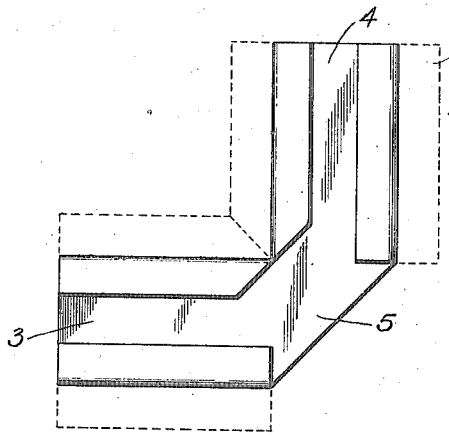


Fig. 2

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UNITED STATES PATENT OFFICE.

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DEVICE FOR RENDERING PACKAGES, BOXES, ETC., PILFERPROOF.

Application filed July 8, 1921. Serial No. 483,141.

To all whom it may concern:

Be it known that I, JOHN W. LESLIE, a citizen of the United States, and a resident of Evanston, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Device for Rendering Packages, Boxes, Etc., Pilferproof, of which the following is a specification.

This invention relates to means for reinforcing and rendering packages, boxes cartons or the like pilfer proof, i. e. to render pilfering impossible without detection.

An object of the invention is to produce a device of the character described which will be economical to make and simple and efficient in application and operation.

Referring to the drawings which present an illustrative embodiment of the invention:

Fig. 1 is a perspective view of a fibre carton having my invention applied thereon.

Fig. 2 is an underneath plan view of the fastening device utilized in making the pilfer proof joint, with dotted lines indicating the contour of the blank from which the sleeve is made.

The drawings show a fibre carton 1 about which are tightly stretched a pair of reinforcing binders 2, applied in different directions so that they cross on two of the sides of the carton, one of which is shown. These binders preferably comprise flat metallic box strapping. Their number and arrangement may be varied at will, but to render a carton or the like pilfer proof, it has been found desirable to run the binders around the carton in two ways. Even where this has been done successful pilfering is sometimes effected by cutting one of the binders, or slipping it off the package, an act which leaves no noticeable trace and frequently escapes detection. Thus the consignee and the terminal railroad are warned to examine the package carefully, but if one binder can be completely removed the package may show no sign of tampering.

In order to make such practices of pilfering impossible I provide the intersection joint shown in the drawing wherein each strap of two involved in an intersection is securely sealed and locked in a common fastening device, so that it is impossible to remove either binder without leaving conspicuous evidence that the package has been tampered with.

The intersection joint comprises a compound fastening device having formed thereon a slotted tubular sleeve 3 and a second slotted tubular sleeve 4 at right angles to the first, both sleeves being formed from a single piece of metal and connected by the integral part 5. Each sleeve is of appropriate dimensions to receive a box strap and be formed therewith into a sealed joint. This compound device may be formed by folding over portions of an appropriate blank. The blank from which the device shown in Fig. 2 may be formed, is shown in that figure, the dotted lines showing the four flanges which are folded over as shown at 6, to form the two slotted tubular sleeves. Thus the manufacture of the compound device of the invention is exceedingly simple and economical.

In application each of the two binders 2 is threaded through one of the sleeve portions of the compound fastening device as it is applied, the slotted under face of the device being placed underneath or against the face of the package. Thereafter with a suitable tool, conjoint interlocking deformations 7 are made in each sleeve portion and its enclosed strap, whereby a sealed joint between the device and each strap is made, which can neither be pulled out nor otherwise opened without leaving clear evidences of tampering.

The particular deformation shown in the drawing is that illustrated and described in the Flora Patent 1,252,680 of January 8, 1918 wherein the sleeves and enclosed straps are crimped edgewise to form a transversely bowed joint. Obviously other types of sealed joint between the sleeve and strap might be made in the practice of this invention.

It is clearly apparent that the intersection joint herein disclosed, prevents the removal of either binder except by tampering with the joint. Since both binders are locked by a sealed joint to the common seal, and it is impossible to disengage either of them without leaving conspicuous evidence of tampering, the joint is efficiently pilfer proof.

By making the intersection device of a unique and conspicuous color the attention of railroad and other transportation officials or consignees would be directed thereto; any abnormality in the appearance of the seal immediatley would call for investigation or a refusal to accept the package. Pilfering

of a package equipped with the seal of this invention without producing some abnormality of the seal would be impossible.

Having described my invention, I claim:

1. An intersection joint for crossed binders on fibre cartons or the like comprising in combination, a pair of crossed binders, a sheet metal device having formed integrally thereon a pair of sleeves each extending in the direction of a separate binder, said binders being embraced in said sleeves, and sealed thereto by conjoint interlocking deformations, whereby the removal of the binder is rendered impossible without leaving evidence of tampering.

2. An intersection joint for box strapping, comprising a pair of crossed binders on a box or package, a compound seal involving both said binders and comprising conjoint interlocking deformations in a common device and each binder whereby each binder is securely locked and sealed to the common device.

3. An intersection joint for box strapping, comprising a pair of crossed binders on a box or package, a compound seal having a pair of sleeves thereon extending in different directions, each sleeve enclosing one of said binders and a sealed joint formed in each sleeve and the binder it contains.

4. An intersection joint for box strapping, comprising a pair of crossed binders on a box or package, a compound seal having a pair of extensions thereon extending at right angles to each other, and a tension resisting sealed joint between each binder and the seal.

5. The method of rendering a package pilfer proof, which consists in applying binders about the package in different directions, whereby said binders intersect on the package, and in sealing each of said binders adjacent the point of their intersection directly to a single member, whereby each binder is locked by a sealed joint to the other.

6. An intersection seal for box binders or the like, comprising a sheet metal device having two projections extending in different directions, each projection having its longitudinal edges folded over to produce a slotted tube, and an integral connecting portion between the two projections whereby is provided a compound intersection seal adapted to be engaged with and sealed to two box binders.

7. A pilfer preventing joint for box binders and the like, comprising in combination, a pair of binders applied about a box or package and a sheet metal member having integral legs adapted to overlie said binders respectively and be crimped thereto, whereby said binders are sealed together, whereby neither can be removed from the package without leaving a mutilated portion sealed to the other.

8. A pilfer preventing joint for box binders or the like comprising in combination a pair of binders applied about a box or package, a common sealing member having integral portions crimped with said binders respectively, whereby removal of either binder without leaving a mutilated member attached to the other binder, or showing evidence of tampering, is rendered impossible.

In witness whereof, I hereunto subscribe my name this 22 day of June, A. D. 1920.

JOHN W. LESLIE.