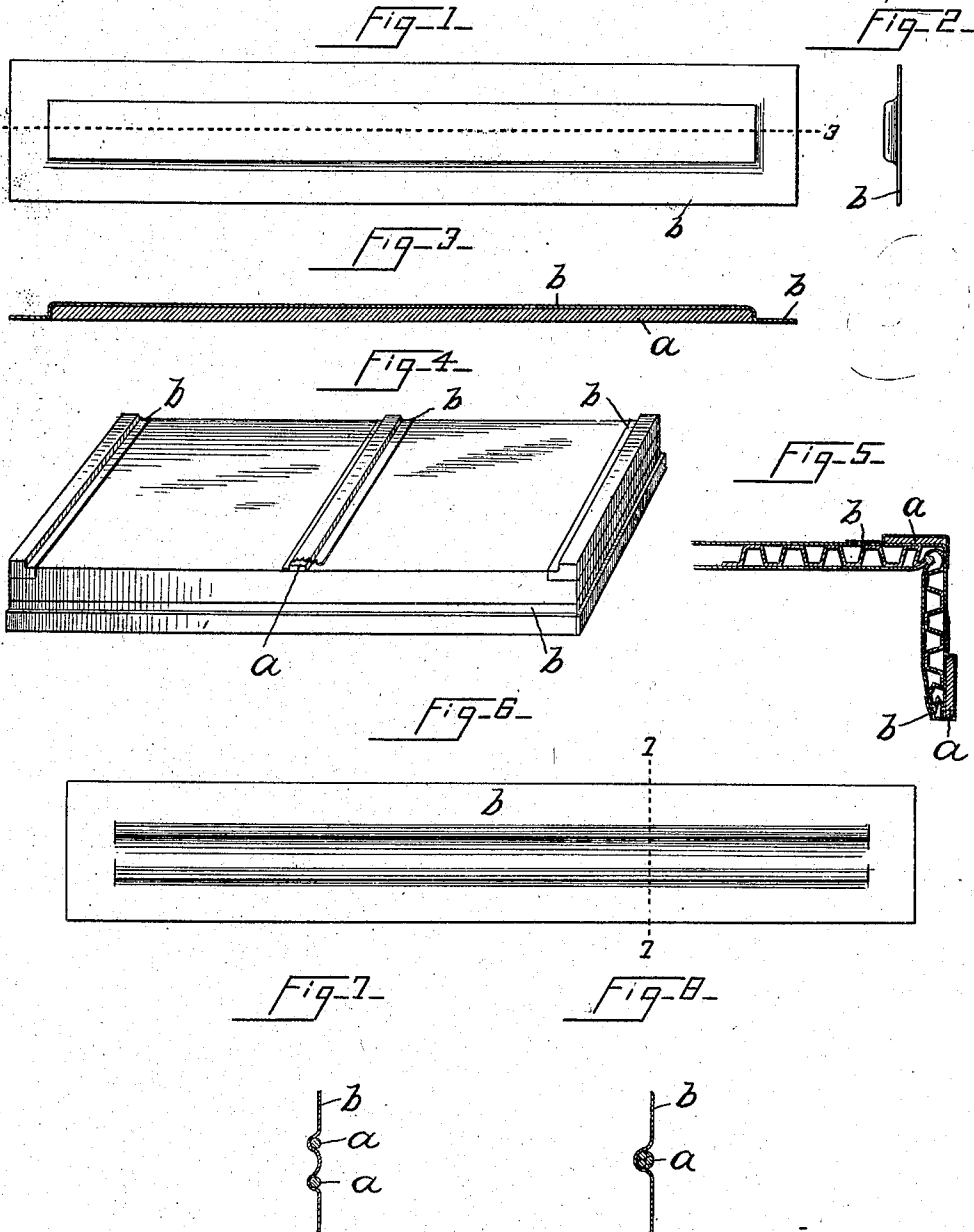


C. W. LEWIS.
 REINFORCING STAY FOR PAPER BOXES AND THE LIKE ARTICLES.
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905,335.

Patented Dec. 1, 1908.



WITNESSES
 Frank C. Palmer
 Madeline D. Ritchie

INVENTOR,
 Charles W. Lewis,
 BY
 Frank H. Allen
 ATTORNEY.

UNITED STATES PATENT OFFICE.

CHARLES W. LEWIS, OF YONKERS, NEW YORK, ASSIGNOR TO THE THOMPSON & NORRIS COMPANY, OF BROOKLYN, NEW YORK, A CORPORATION OF NEW JERSEY.

REINFORCING-STAY FOR PAPER BOXES AND THE LIKE ARTICLES.

No. 905,335.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES W. LEWIS, a citizen of the United States, residing at Yonkers, in the county of Westchester and State of New York, have invented a certain new and useful Improvement in Reinforcing-Stays for Paper Boxes and the Like Articles, of which the following is a specification, reference being had to the accompanying drawings.

This invention has for its object the provision of an inexpensive stay for reinforcing and stiffening paper boxes, cartons, crates, mailing boards, and the like articles. The said stays are specially desirable for use with paper boxes, or boxes made wholly or in part of cellular board, which are designed to carry heavy loads, and said stays are designed to be applied to such boxes at or near the edges or angles thereof, and particularly, at the points most likely to be cut by the binding string, or otherwise crushed.

In the accompanying drawings, Figure 1 is an outer face view of one form of stay embodying my present invention and Fig. 2 is an end view of the same. Fig. 3 is a longitudinal, central, sectional, view of the same. Fig. 4 is a perspective view of a box or cover having reinforcing stays of my improved form secured thereto. Fig. 5 is a relatively enlarged, sectional, view of a portion of the side and bottom of a box, illustrating one manner of attaching the stay to the box. Fig. 6 is an outer face view of a stay made of wires, and Fig. 7 is a transverse sectional view of the same taken on line 7-7. Fig. 8 is a transverse sectional view of a stay in which a single cord is utilized.

My said stay consists, essentially, of a strip of strong and preferably stiff material, (of which wood is an excellent example) having secured thereto a cover and binding strip of paper or cloth, whose edge and end portions extend beyond the stay proper and are preferably coated with adhesive material, so that the combined stay and cover may be readily secured to boxes as now commonly constructed; my described device being designed to be marketed as an article of manufacture, to be applied to all such boxes, crates &c., as require special strength and stability.

While I prefer to use strips of wood for

my described stays I may use, with satisfactory results, in many instances, strips of cardboard or tin, or I may use one or more wires or stout cords; the same being secured in place on the box, or box-board, by cover sheets, as above described.

In the annexed drawings the letter *a* indicates a strip of wood, or other material suitable for use as a stay and *b* indicates a cover strip, or sheet, of paper or cloth of such size that its sides, and preferably its ends, extend beyond the stay *a*; said extended portions being coated with adhesive material adapted to be moistened and stuck upon the box, cover or board to be reinforced and stiffened. The adhesive material may be applied to the said extensions at, or prior to, the time when the stays are to be thus stuck upon the box or board. If the adhesive is applied at the time the cover strip is first secured to the stay, then it is only necessary to moisten the gummed extension and press it down firmly upon the box or board whenever it is desired to use said stay. The said stays may be located upon the box or box-board as here illustrated or they may be applied in various other ways as, for example, lengthwise or transversely across, the top, bottom or ends of a box or carton, or in any other desired manner.

My described stays may be of any desired length. In some instances they may be long enough to extend around or from end to end of a box, or board, while in other instances it is only necessary to provide stays long enough to reinforce the box-board at the points where the binding strings are located.

Ordinary boxes, cartons and crates of paper become remarkably strong, but light, packages, for transportation purposes, when reinforced and stiffened by the addition of my described stays and this is the more noticeable when cellular board is used in the manufacture of the boxes, cartons or crates.

Having thus described my invention I claim:—

1. A reinforcing stay, for boxes and the like articles, consisting of a strip of relatively strong non-metallic material having attached thereto a flat cover sheet extending beyond the said strip.

2. A reinforcing stay, for boxes and the like articles, consisting of a strip of relatively

strong material having attached thereto a cover sheet with flat unfolded extended flexible edge portions.

3. A reinforcing stay, for boxes and the
5 like articles, consisting of a strip of relatively stiff material having attached thereto and combined therewith a cover sheet with ex-

tended edge portions; said extended portions being coated with adhesive material.

CHARLES W. LEWIS.

Witnesses:

W. T. CHAPIN,
FRANK H. ALLEN.