W. F. GRUPE AND A. A. ADAMSON.

RIM BOARD.

APPLICATION FILED JUNE 17, 1918.

1,379,622. Patented May 31, 1921.

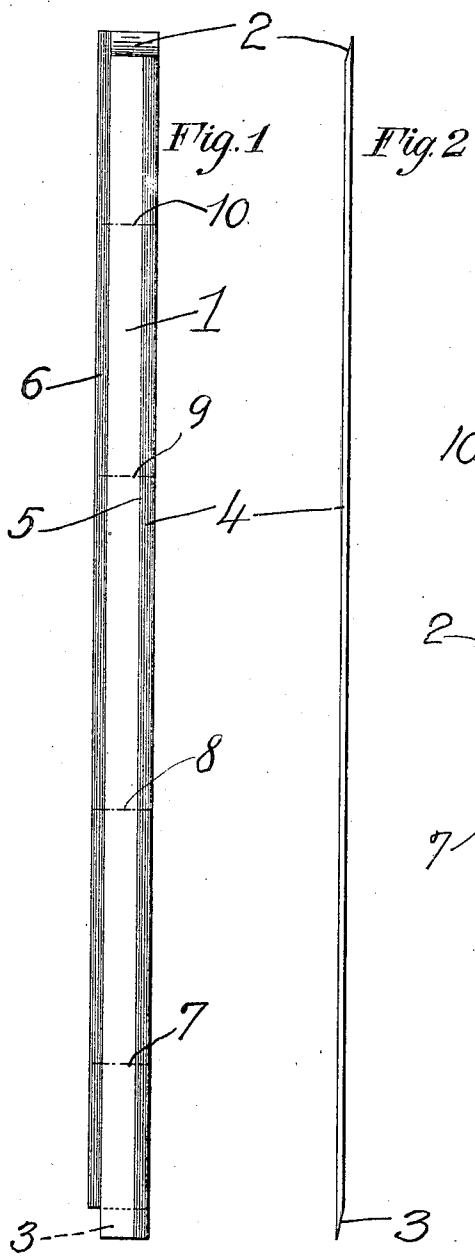
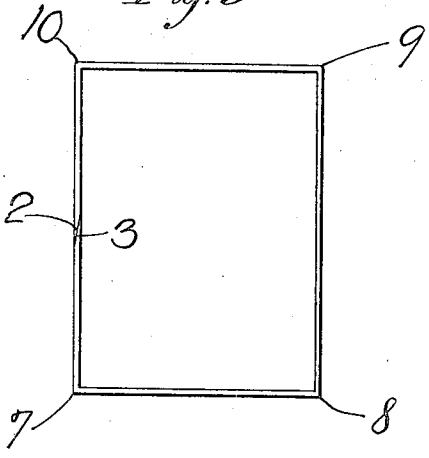


Fig. 1

Fig. 2

Fig. 3



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RIM-BOARD.

1,379,622. Specification of Letters Patent. Patented May 31, 1921.

Application filed June 17, 1918. Serial No. 240,425.

To all whom it may concern:

Be it known that we, WILLIAM F. GRUPE and ALLAN A. ADAMSON, citizens of the United States of America, residing at Hudson Boulevard, North Bergen, county of Bergen, State of New Jersey, and Brooklyn, county of Kings, State of New York, have invented certain new and useful Improvements in Rim-Boards, of which the following is a specification.

This invention relates to rim boards.

More particularly, the invention relates to a strip for rim boards and the method of making and assembling the same.

In the manufacture of paper boxes, particularly from strips of paper board or equivalent, strips are provided for the rim of the cover or tray. In such manufacture, as previously carried out, it has been proposed to provide a strip of paper board or equivalent having butt ends and to apply a finish paper to each strip of board, having an end extending beyond one end of the strip of board, forming a tab, whereby upon folding the strip to form the rim, or tray, the tab is utilized to bind together the resultant cover or tray. However, in such practice, serious difficulties have arisen owing to the tab contacting with other parts of the box fed into the machine resulting in deforming the tabbed box part or otherwise increasing the number of rejected boxes.

An object of this invention is to avoid the aforesaid and other difficulties of the prior art by the provision of a strip of paper board or equivalent for the rim or neck having the finish paper extending only to or within the ends of the board and by the further provision of skived ends, adapted when the board is formed, *i. e.*, "folded" to provide sufficient contacting areas to effectually bind and hold the rim together, and to the top, or bottom or other part of the box part.

In the preferred form of carrying out the invention, the finish paper and the strip are led in more or less register into a suitable machine, or performed manually, and the paper folded over the strip. The strip having the finish paper applied thereto is cut by suitable skiving means to proper lengths.

Other features and objects of the invention will be more fully understood from the following description and the accompanying drawings, in which—

Figure 1 is a bottom plan view of one form of the invention; Fig. 2 is a side elevation of the same; Fig. 3 indicates in top plan view a resultant tray, or cover, or neck formed by folding the strip indicated in the aforesaid figures.

Referring to the drawings, the strip 1 is formed of paper board, or equivalent, and is of a suitable length determined by the perimeter of the resultant rim or neck.

The end 2 of the strip 1 is skived in one direction from the exterior face of the strip toward the body of the strip, whereas the opposite end 3 is skived in the opposite direction, both, skived faces of the two ends however extending in a substantially parallel direction.

If the skived ends are cut circularly then one face would be concave and the other face correspondingly convex.

The finish paper 4 is applied to the exterior face of the strip 1 and preferably folded over as indicated at 5, the inner face of the strip 1 for a distance determined by the desired extent of exposure of the strip. The finish paper is of sufficient width to provide for the overlap 6, affording a continuation of the finish paper on the exposed face of the top or bottom, as the case may be, serving to secure and hold the rim to the same.

The strip 1 is scored or cut at the regions 7, 8, 9, and 10, corresponding to the corners of the resultant rim or neck.

I prefer to attain the formation of the corners by the application of steam or other vaporized fluid capable of "wetting" the board, or equivalent, the same being projected against the strip at the proper points indicated by the lines 7, 8, 9 and 10, as by means of a series of sprays or nozzles. The rim is then subjected to pressure in a suitable former comprising exterior and interior pressure plates, and preferably heat is applied simultaneously with pressure, to thereby reduce the period of treatment for setting the corners.

In whatever way the strip is folded, mechanically or otherwise, the skived end 2 exteriorly overlaps the reversely skived end 3, suitable adhesive being applied to bind or connect the said skived ends together. The resulting connected skived ends effect

a joint of substantially the same thickness as the remainder of the strip.

Preferably the strip of board having the finish paper applied thereto as aforesaid, is cut at a single operation to a proper length and to provide for the skived ends.

The projecting edge 6 of the finish paper is fixed by suitable adhesive to a remaining part of the box part, such as the cover or bottom as will be understood.

It will be understood that the corners may be formed at the desired spaced locations by grinding or otherwise gaging, by scoring, by indentation or otherwise, slitting on the opposite face of the board or by other procedure, as will be understood by those skilled in the art.

Whereas we have described our invention by reference to specific forms thereof, it will be understood that many changes and modifications may be made without departing from the spirit of the invention as defined by the appended claims.

We claim.

1. The method of forming a foldable box part comprising providing a strip of paper board; applying finish paper thereto; severing the board strip and finish paper to provide a skived end, the length of the severed finish paper being substantially equal to the perimeter of the box part whereby the severed edge of the finish paper is coincident with one of the severed edges of the skived end of the board strip, and thereafter folding the obtained length of board strip and finish paper applied thereto to cause said skived end to engage the opposite end of said board strip.

2. The method of forming a foldable box part comprising providing a substantially flat strip of paper board, applying finish paper to said strip while lying flat; cutting said strip while lying flat to provide a length of the finish paper substantially equal to the perimeter of the box part and to provide the paper board with a skived end; and thereafter folding the obtained length of paper board and finish paper applied thereto, to cause said skived end to engage the opposite end of said board strip.

3. A strip for a foldable box part comprising a substantially flat strip of paper board having a length on either longitudinal face substantially equal to the perimeter of the box part, the opposite ends of said strip being oppositely skived, finish paper applied to the strip, one end of the finish paper on one of said longitudinal faces of the board strip being coincident with the tip of one of said skived ends and the other end of the finish paper being coincident with the intersection of the other skived end with said one longitudinal face.

4. A strip for a folded box part, comprising a substantially flat strip of paper board having the length of each of its two longitudinal faces substantially equal to the perimeter of the box part, the opposite ends of said strip being oppositely skived and finish paper attached to one of said longitudinal faces of said strip and having a lateral portion extending laterally and free of said strip, the opposite ends of said finish paper on said one longitudinal face being coincident with the respective lines of intersection of the skived ends with said one longitudinal face.

In testimony whereof we have signed this specification this 3rd day of June, 1918.

WILLIAM F. GRUPE.
ALLAN A. ADAMSON.