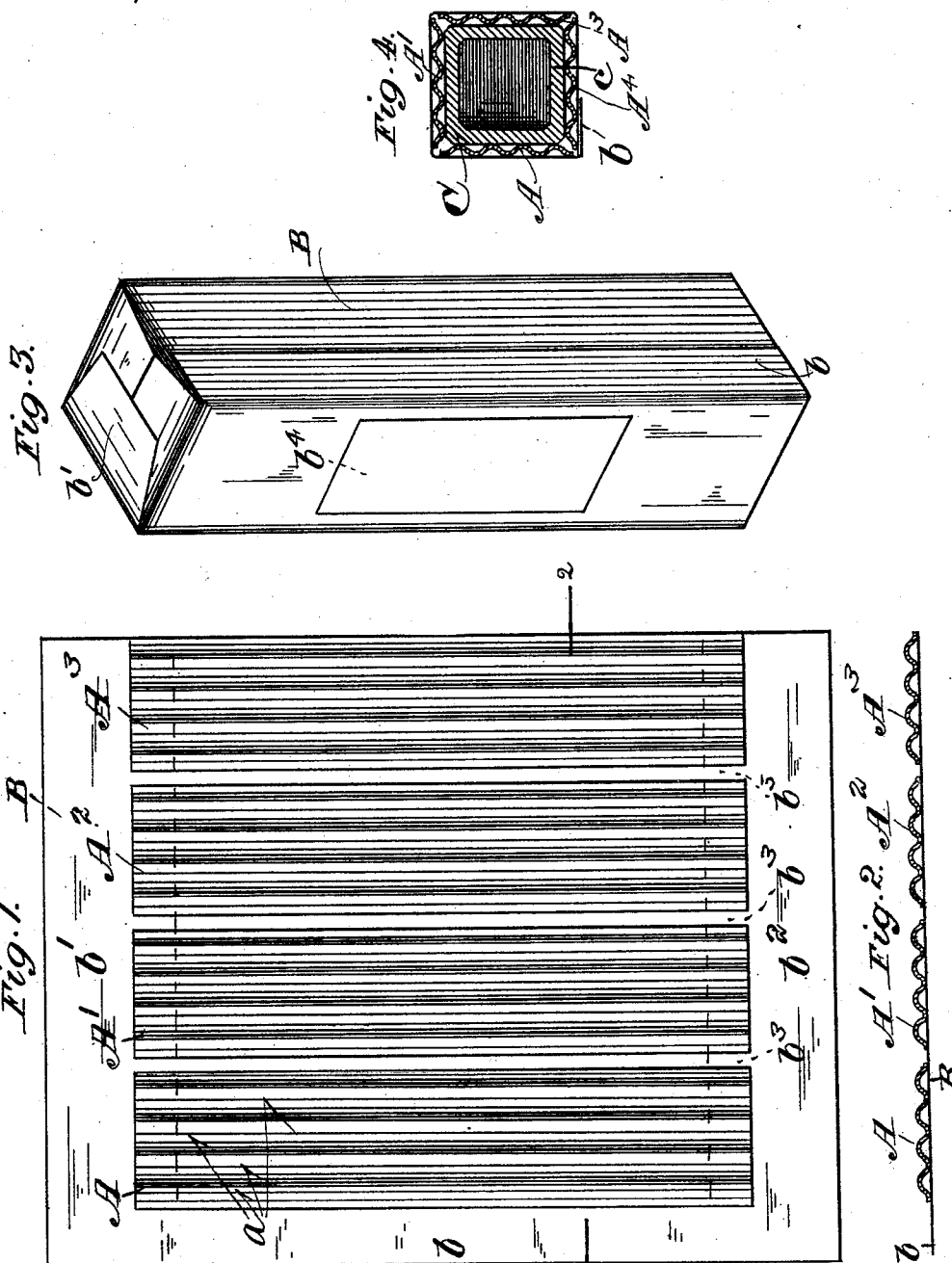


(No Model.)

H. J. MARK.
BOTTLE WRAPPER.

No. 472,462.

Patented Apr. 5, 1892.



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HENRY GAUS, JR., OF SAME PLACE.

BOTTLE-WRAPPER.

SPECIFICATION forming part of Letters Patent No. 472,462, dated April 5, 1892.

Application filed June 3, 1891. Serial No. 394,954. (No model.)

To all whom it may concern:

Be it known that I, HENRY J. MARK, of St. Louis, Missouri, have made a new and useful Improvement in Bottle-Wrappers, of which the following is a full, clear, and exact description.

The leading features of the improved wrapper are a wooden corrugated part, the directions of the corrugations being with the grain of the wood, and the combination of an outer flat covering with an inner wooden corrugated part, said covering held taut upon said corrugated part, substantially as is hereinafter described and claimed, aided by the annexed drawings, making part of this specification and exhibiting a desirable mode of carrying out the improvement, and in which—

Figure 1 is a view looking toward the inner side thereof of the wrapper in a developed form; Fig. 2, a section on the line 2 2 of Fig. 1; Fig. 3, a view in perspective of one form of the wrapper as it appears upon a bottle, and Fig. 4 a horizontal section of the wrapper upon a bottle.

The same letters of reference denote the same parts.

The wooden corrugated part is represented in the form of the sections A A' A² A³, and B represents the sheet of paper which preferably forms the outer covering that is applied to the sections. The corrugations *a* of the wood are parallel with the grain of the section or piece of wood having the corrugations.

The wooden portion of the wrapper may be in one continuous piece or in two, three, or more sections. For most purposes I prefer four sections, substantially as shown, and said sections may be relatively arranged so that they abut quite closely upon or even to lap upon each other, or so that they are separated from each other, substantially as shown.

It is desirable to form the corrugated portion of the wrapper in sections, partly because it enables it to be made from smaller pieces of wood and the corrugations thereby economically produced and by means of simpler and less expensive machinery and partly because it facilitates the application of the wrapper to the object it is intended to protect, for the wrapper can be bent or turned readily on the lines which separate the sections,

and the wrapper thus be readily adapted not only to round bottles, but also to square or angular ones.

The improvement may be partly carried out with the wooden corrugated portion only; but in most instances the covering B should be used in conjunction with the corrugated portion and partly to unite the corrugated portions when in the form of separated sections, as shown, but more especially for the purpose of providing a better protection for the article being wrapped. To this end said covering, which is preferably a suitably-strong piece of paper, is not only attached to the corrugated part, but connected therewith so as to be taut thereon throughout the width thereof—that is, so as to enable the covering to remain stretched from ridge to ridge of the corrugated portion when subjected to external blows or shocks—as, for instance, by reason of bottles in a case striking each other in the handling of the case—for if the covering yields to pressure, so that it between the convexities or ridges of the corrugated portion conforms to the curvature of the corrugations and the convexities of the wrapper upon one bottle enter the concavities of the wrapper upon another bottle, it does not afford as much protection to the article being wrapped as if it retains its flat form.

A paper covering necessarily yields somewhat to pressure; but when it is applied so that it is substantially flat upon the corrugated portion and is united thereto substantially throughout the width thereof it cannot well yield so as to conform closely to several of the concavities of the corrugated portion simultaneously. If it is forced into one of them, it is the less liable to enter the adjoining concavities, and, irrespective of this, the covering, when attached to the corrugated portion, as described, is of special value in staying the corrugations (made as they are parallel with the grain of the wood) against splitting.

The most desirable mode of uniting the covering to the corrugations for the purpose described is to sew the covering and sections together across the width thereof, substantially as shown. Said covering may be of the same size substantially as that of the corru-

gated portion or of the combined corrugated sections, or the covering may be both wider and higher than the same. So far as the width of the wrapper is concerned the covering is preferably extended at one side b only; but at the top and bottom of the wrapper the covering sometimes is extended substantially as shown at b' and b^2 , respectively. The side extension b is useful in uniting the side edges of the wrapper in use. This is exemplified in Fig. 4, in which view C represents a bottle, say, having square corners, and in this instance the width of a section A A', &c., corresponds substantially with the width of one of the bottle sides C, and thereby the wrapper can be applied quite advantageously to the bottle, as shown. The sections respectively come against the sides of the bottles, and the portions b^3 of the covering between, the sections come, respectively, opposite the corners of the bottles, and the extension b laps upon the adjoining section, and the wrapper can be further secured by fastening said extension and adjoining section together. The sections A A', &c., may in width vary from that of the sides of the bottle.

An additional object of the improvement is to provide what may be termed a "store-wrapper," as well as a wrapper for packing purposes only.

After the bottle or whatever article the wrapper is applied to has been enwrapped, as indicated in Fig. 4, the extensions b' b^2 are folded, as indicated in Fig. 3, to inclose the bottle at its ends as well as at its sides, substantially as shown. The bottle having the wrapper thus applied thereto can be safely transported, then withdrawn from its transportation-case and placed upon the shelf in a store or elsewhere, and the same wrapper made to serve a double purpose.

To more completely carry out the improvement, the covering B has a suitable space b^4 , to which a label or inscription may be applied. The described mode of holding the covering taut upon the corrugated portion is promotive of the last-described use of the wrapper in

that it is calculated to provide a smoother surface to receive the inscription referred to.

Making the corrugation parallel with the grain of the wood is advantageous in several ways. It enables the corrugation to be made considerably deeper than it can be when the corrugation is not parallel. For example, the corrugation can be made about twice as deep as it can be when the corrugation is at right angles to the grain of the wood. The corrugation is also more elastic than one in which the grain is not parallel with the corrugation. Furthermore, such a corrugation as here described and claimed can be cut from dry wood. This form of corrugation in a bottle-wrapper is therefore desirable irrespective of any auxiliary outer covering. It will be noted that in use the corrugations are arranged vertically in the wrapper.

I claim—

1. A bottle-wrapper combining in its construction an inner wooden corrugated part and an outer covering, said covering being held taut upon said corrugated part throughout the width thereof by stitching, substantially as described.

2. A bottle-wrapper combining in its construction an inner wooden corrugated part and an outer covering, the direction of the corrugation being parallel with the grain of the wood and said covering being fastened to and held taut upon said corrugated part throughout the width thereof by stitching, substantially as described.

3. A bottle-wrapper made in sections, as described, each combining in its construction an inner wooden corrugated part and an outer smooth covering, the direction of the corrugation being parallel with the grain of the wood and said corrugation extending vertically in the wrapper and said covering being fastened to and held taut upon said corrugated part, substantially as described.

Witness my hand this 1st day of June, 1891.

HENRY J. MARK.

Witnesses:

C. D. MOODY,
B. F. REX.