

E. C. RINNER.  
BOTTLE WRAPPER.  
APPLICATION FILED JUNE 12, 1909.

934,758.

Patented Sept. 21, 1909.

Fig. 1.

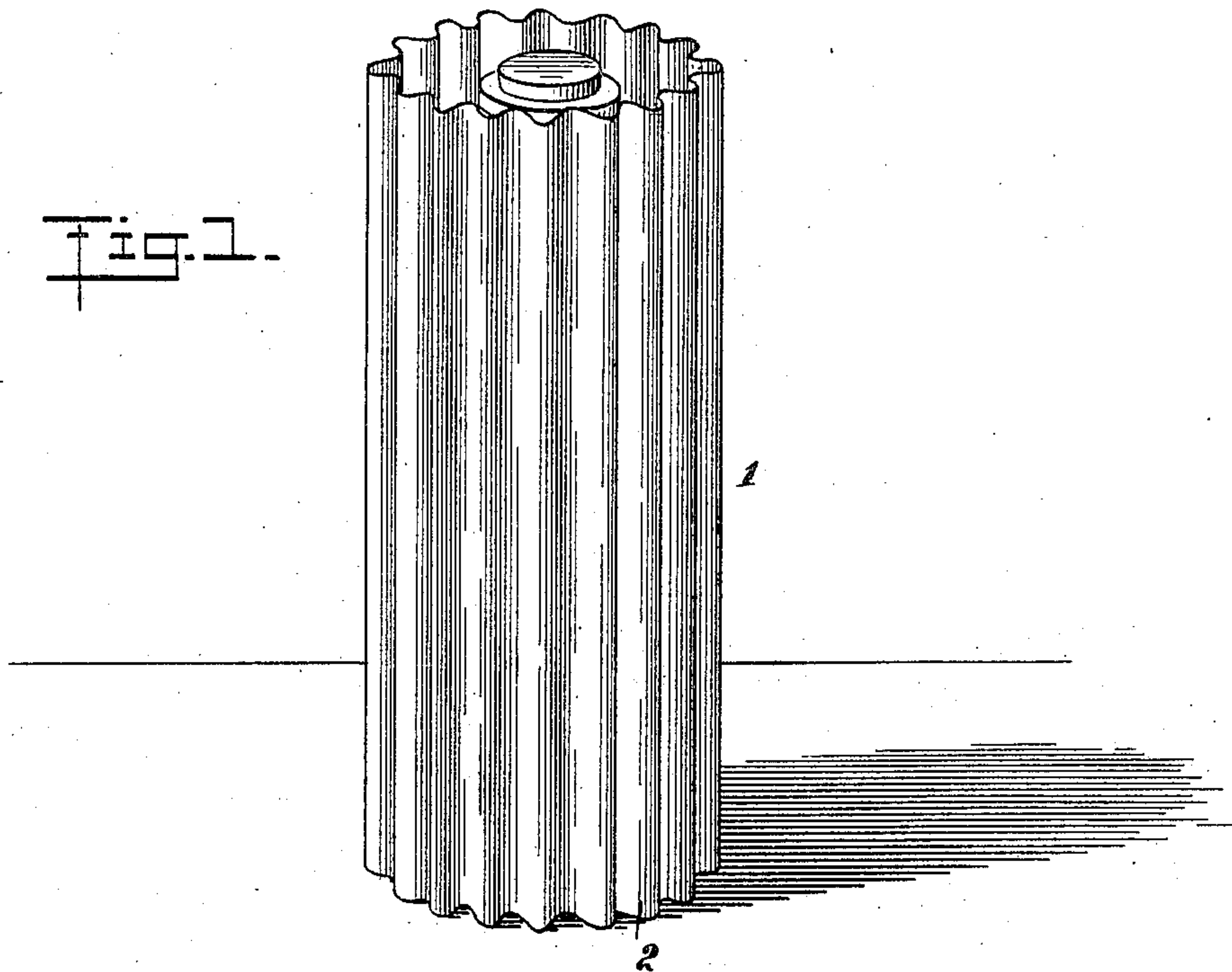
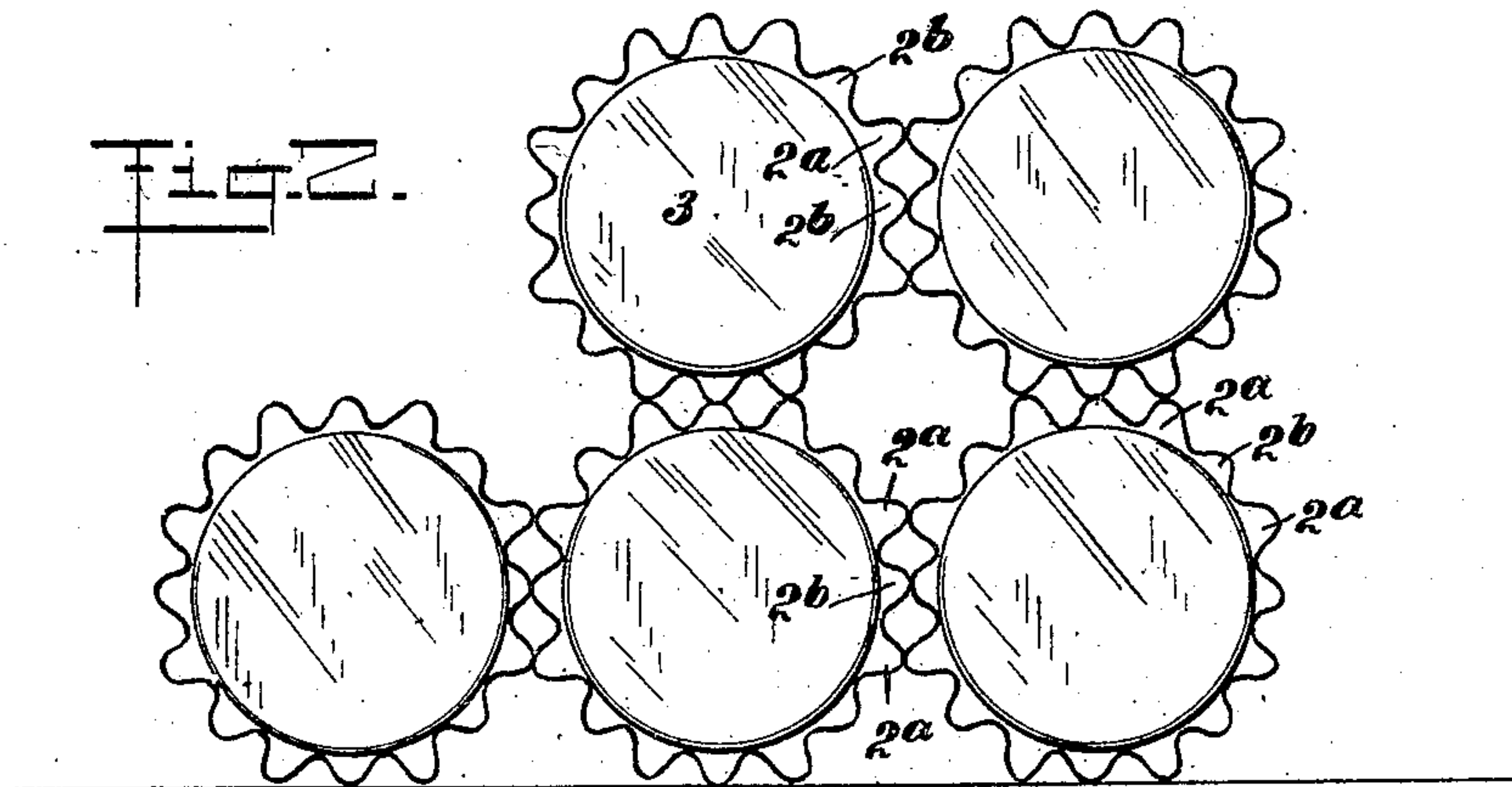


Fig. 2.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## BOTTLE-WRAPPER.

934,758.

Specification of Letters Patent. Patented Sept. 21, 1909.

Application filed June 12, 1909. Serial No. 501,746.

*To all whom it may concern:*

Be it known that I, ELIJAH C. RINNER, a citizen of the United States, and a resident of Coshocton, in the county of Coshocton and State of Ohio, have invented a new and Improved Bottle-Wrapper, of which the following is a full, clear, and exact description.

This invention relates to wrappers for bottles or jars, and particularly to that type of wrapper which is formed of corrugated cardboard or pasteboard.

The object of the invention is to produce a wrapper of this type, having an improved construction which will tend to distribute the pressure when a number of articles covered by the wrappers are packed in a shipping case.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a perspective illustrating a wrapper constructed according to this invention, and representing the same as applied to a bottle; and Fig. 2 is an end elevation showing a number of bottles provided with my improved wrapper and illustrating how the form of the wrapper operates to distribute the pressure on the different bottles.

Referring more particularly to the parts, 1 represents the wrapper which is in the form of a cylinder, open at both ends, the sides of the cylinder being provided with deep corrugations or ribs 2 which extend longitudinally of the elements of the cylindrical surface. These ribs 2 are of two forms, indicated specifically by the numerals 2<sup>a</sup> and 2<sup>b</sup>. The ribs 2<sup>b</sup> are interposed between the main ribs 2<sup>a</sup>, and are of less height, that is, they do not project as far from the central axis of the wrapper as do the other ribs. The amount of projection of the main ribs 2<sup>a</sup> is such that a tangent can be drawn to the outer face of the rib 2<sup>b</sup>, and at the same time to a tangent to the ribs 2<sup>a</sup>. In other words, the apices of three adjacent ribs having a depressed rib 2<sup>b</sup> intermediate will be substantially in the same plane. On account of

this arrangement, when the bottles 3 having the wrappers 1 thereupon are stacked in rows together, as indicated in Fig. 2, they may be arranged so that three ribs on each side will be in contact with the corresponding three ribs adjacent the bottle, that is, the ribs 2<sup>a</sup> come opposite to each other, and the ribs 2<sup>b</sup> come opposite to each other. In this way the pressure which the bottles exert upon each other is distributed through three ribs and a more effective packing results, that is, the shock will be more readily absorbed than would otherwise result.

Although I have represented the wrapper as being of cylindrical form, it is evident that the invention can be as readily applied to wrappers of conical form. The wrapper may be considered as being of tubular form, and either conical or cylindrical as desired.

Having thus described my invention, I claim as new and desire to secure by Letters Patent,—

1. A wrapper of the class described, having a tubular body presenting longitudinally disposed ribs, certain of said ribs projecting beyond the remainder of said ribs, so that a plurality of said ribs may engage each other when the articles enveloped in said wrappers are packed together.

2. A wrapper of the class described, having a tubular body with longitudinally disposed ribs on the surface thereof, certain of said ribs being arranged to project beyond the remainder thereof, so that the apices of two adjacent ribs and the intermediate rib may lie substantially in the same plane.

3. A wrapper of the class described, having a tubular body corrugated longitudinally and presenting a plurality of longitudinally disposed main ribs with intermediate ribs disposed between said main ribs and depressed with respect to the same, so that the apices of each pair of main ribs and the apex of the intermediate rib therebetween lie substantially in the same plane.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ELIJAH C. RINNER.

Witnesses:

BURT F. VOORHEES,  
THOS. E. DUNCAN.