C. G. BIEDINGER.

BOTTLE WRAPPER.

No. 342,818.

Patented June 1, 1886.

FIG.Z. FIG.S. FIG.2. FIG.4. FIG.5. FIG.6. FIG.Y.

United States Patent Office.

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BOTTLE-WRAPPER.

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Application filed May 18, 1885. Serial No. 165,899. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. BIEDINGER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State 5 of Ohio, have invented certain new and useful Improvements in Bottle-Wrappers, of which the following is a specification, reference being had therein to the accompanying

drawings.

The object of my invention is to furnish a wrapper that can be fitted around the body and conical neck of the bottle without cutting the paper, felt, or other material to any special shape, the preferred construction thereof being 15 as follows: A flexible tube of paper, felt, or other suitable material is first made of practically the same length and diameter as the bottle to be inclosed therein, and the uppor portion of said tube is creased or bent, thereby affording 20 a cone having a pair of wings, folds, or flaps, which are capable of being compressed around the bottle-neck. These flaps or wings may be retained in this compressed condition around the cone either with cement, cord, or wire, or 25 any other convenient tie or binder; or the same result may be effected by inserting the free corners of the wings or flaps within slits or incisions in the appropriate sides of the cone. Furthermore, said cone may be made 30 either with or without a longitudinal seam, according to the material of which it is composed, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a perspective view of a seamed and slitted tube, 35 the places where the flaps are to be formed being indicated by dotted lines. Fig. 2 is a perspective view showing the flaps formed and partially bent around the cone. Fig. 3 is a perspective view showing the flaps pressed 40 down snugly against the exterior of the cone, their corners inserted in the slits of the latter, and a binder applied around the neck of the wrapper. Figs. 4 and 5 are perspective views of a modification of my invention. Figs. 6 45 and 7 are enlarged plans of the two different forms of my wrapper.

The tube A of which the wrapper is composed is made of any flexible material that is sufficiently cheap for packing purposes, and 50 can be formed either with or without a longitudinal seam, B, as circumstances may suggest. The tubular wrapper comes from the l

machine in a flattened condition, and with lines D D'scored diagonally across it, to facilitate the bending down of the flaps or wings 55 when the wrapper is applied to a bottle. In this flattened shape it can be conveniently packed for transportation, and is ready to be set up for use by the operatives who pack the bottles. This tube is practically of the same 60 length and diameter as the bottle that is to be inclosed therein, and is usually provided near its upper end with a pair of slits or incisions, CC', for a purpose that will presently appear. After being thus slitted the tube is bent at the 65 places indicated by the dotted lines D D' in Fig. 1, so as to produce a cone having the wings, flaps, or folds E E'. (Seen in Fig. 2.) These wings are of any suitable size at top, but gradually diminish as they descend, their 70 points of juncture with the tube A being about where the neck is joined to the body of the bottle around which the wrapper is to be applied. The corners or free portions of said wings are then inserted in the slits C 75 C', as seen in Fig. 3, which act completes the formation of the wrapper and renders it at once ready for use. It will be observed that the wrapper as thus made is a complete structure independent of the bottle which 80 it is intended to protect, and that in this completed form it has both ends open and unobstructed. Its application is readily effected by slipping the tube down around the bottle, the body of the latter being thereby caused 85 to occupy the cylindrical portion A of said tube, while the neck of the vessel fits within the tapering part or cone of the wrapper; consequently a considerable portion of the conical part of the wrapper is composed of no 90 less than six thicknesses of the material, as seen in Fig. 6, in which illustration the slits and tie or binder are omitted, and the folds E E' are simply compressed against the exterior of the wrapper. Said flaps may, however, be per- 95 manently glued or cemented to the cone, or they may be retained in place by a cord or wire or other tie or temporary binder F, as seen in Fig. 3. These modes of securing the flaps leave the upper end of the wrapper open and unobstructed, thus allowing the wrapper to drop down over the neck of the bottle until its conical portion rests upon and is supported in position solely by the tapering portion o

the bottle. This enables the wrapper to be applied to bottles of differing heights, since whatever the length of the bottle-neck the wrapper is not prevented from slipping down 5 until it rests snugly upon the body and upper

tapering portion of the bottle.

The tube seen in Fig. 4 is seamless, and has two longitudinal slits, G G', on opposite sides of the same, said slits being carried down 10 about as far as the flaps are to extend. After being thus slitted the flap H is bent inwardly, and its adjacent flap H' is folded over said flap H. The flap I', on the opposite side of | the tube, is also bent inwardly, and the adja-15 cent flap I is folded over it, thereby affording six thicknesses of material that extend around the greater portion of the cone, as more clearly seen in Fig. 7. These interlocking flaps H H' and I I' can then be glued, cemented, or 20 tied together; or they can be retained in place by the hand while the bottle is being inserted in the wrapper and packed in a barrel, box, crate, or other shipping-receptacle.

Whichever construction is adopted, it is ap-25 parent that the wrapper can be readily arranged to suit any size and shape of bottle or other similar vessel, and without cutting the material to a special form, the only precaution necessary being to extend the flaps or 30 folds down far enough to produce a sufficient conical envelope around the bottle-neck. It is also apparent that the flaps or folds can be twisted around the bottle-neck at the moment the bottle is placed in the barrel or other ship-35 ping-receptacle, thereby avoiding loss of time,

and enabling the wrapping operation to be

effected by boys or girls.

I am aware that a bottle-wrapper has been constructed of corrugated veneer, each end 40 being left open, and the upper end being contracted to fit the neck of the bottle. In this wrapper, however, the corrugations are shallow, and are quite numerous, and do not constitute flaps which are folded down into 45 contact with the sides of the conical portion of the wrapper. My construction enables the wrapper to fit the bottle smoothly and snugly, instead of merely touching it at certain points here and there. I am also aware 50 that a bottle-wrapper has been made in which the upper portion is contracted into pyramidal shape by bending down four equidistant flaps, and then securing them by a strip which passes over and closes the upper 55 end of the wrapper, and extends down upon two sides of the wrapper over the flaps. This construction limits the wrapper to bottles of | tie or binder, as F, for the purpose herein dea single length, since upon a short-necked bottle the upper end of the wrapper would be 60 unsupported, while upon a long-necked bottle the wrapper would be suspended with its pyramidal portion out of contact with the tapering portion of the bottle-neck, besides incuring the risk of bursting off the strip which

closes the upper end of the wrapper. I there- 65 fore do not claim, broadly, either of these constructions; but

What I do claim, and desire to secure by Let-

ers Patent, is—

1. A bottle-wrapper having a straight por- 70 tion to fit the body of the bottle, and a conical portion to fit the neck of the bottle, said conical portion having several thicknesses of material by reason of two flaps or wings, which are integral with the wrapper and take their 75 departure therefrom along predetermed lines scored in the wrapper, said flaps lying opposite each other in contact with the sides of said conical portion, thus leaving each end of the wrapper open and unobstructed, whereby 80 the wrapper is enabled to be slipped down over bottles of differing heights, and will be sustained in position solely by the conical portion resting upon the tapering upper portion of the bottle, substantially as shown and 85 described.

2. A bottle-wrapper having a straight portion to fit the body of the bottle, and a conical portion to fit the neck of the bottle, said conical portion having several thicknesses of oo material by reason of two flaps or wings, which are integral with the wrapper and take their departure therefrom along predetermined lines scored in the wrapper, said flaps lying opposite each other in contact with the sides of 95 said conical portion, and retained in position by suitable means which do not obstruct the open ends of the wrapper, whereby the wrapper is enabled to be slipped down over bottles of differing heights, and will be sustained in 100 position solely by the conical portion resting upon the tapering upper portion of the bottle, substantially as shown and described.

3. A bottle-wrapper consisting of a flatened tube having scored lines extending di- 105 agonally across it to indicate where the tube is to be bent to form flaps or wings when the wrapper is applied to a bottle, substantially

as shown and described. 4. A bottle-wrapper composed of a flexible 110 tube having a pair of flaps or folds bent around the neck portion of said wrapper, the free corners of said flaps being inserted in slits made in the sides of said tube, for the

purpose stated. 5. A bottle-wrapper consisting of a flexible tube, A, having a pair of flaps or folds, E E', bent around the neck portion of said wrapper, the free corners of said flaps being inserted in the slits C C', and secured with a suitable 120 scribed.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES G. BIEDINGER.

Witnesses:

JAMES H. LAYMAN, N. ROCKHOLD.