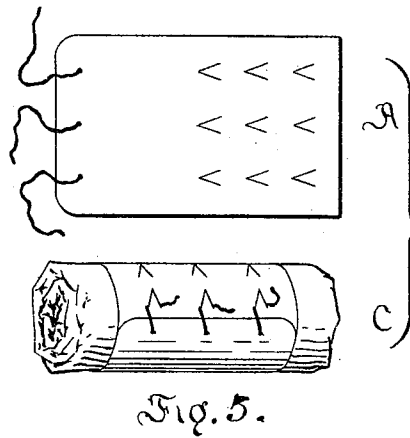
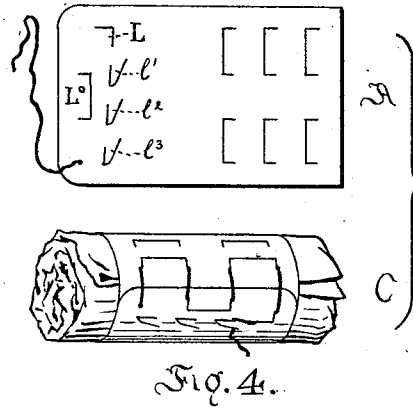
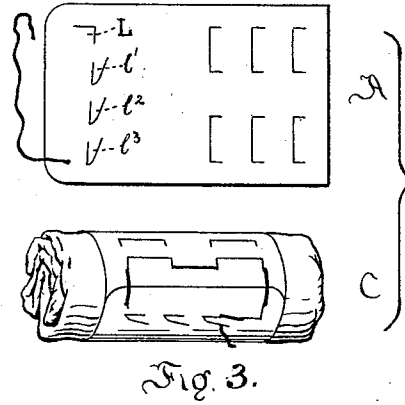
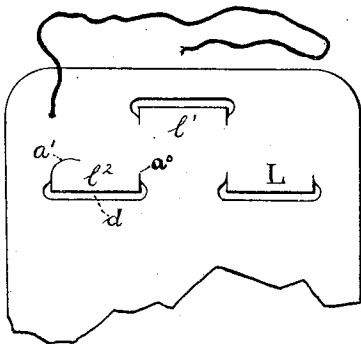
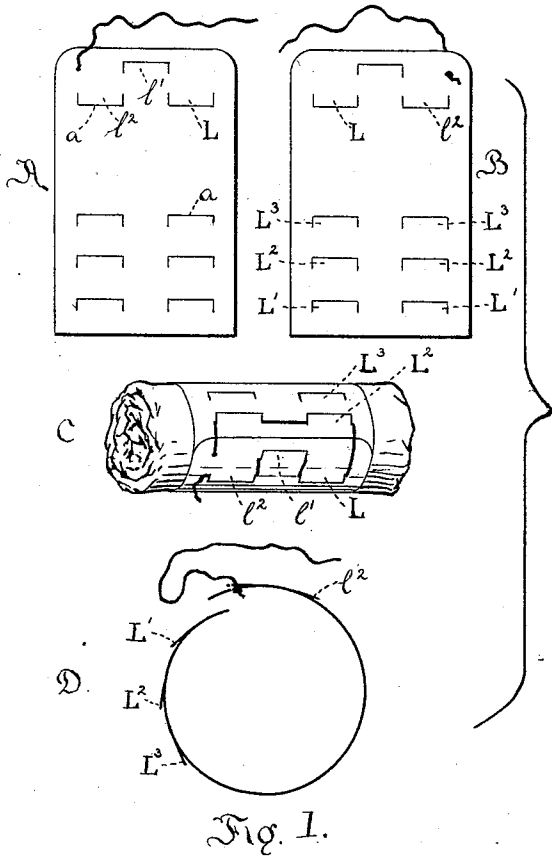


(No Model.)

W. H. YOUNG & I. D. BOYER.  
BUNDLE WRAPPER.

No. 536,797.

Patented Apr. 2, 1895.



Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLIAM H. YOUNG AND ISRAEL DONALD BOYER, OF DAYTON, OHIO; SAID  
BOYER ASSIGNOR TO SAID YOUNG.

## BUNDLE-WRAPPER.

SPECIFICATION forming part of Letters Patent No. 536,797, dated April 2, 1895.

Application filed April 18, 1894. Serial No. 508,059. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM H. YOUNG and ISRAEL DONALD BOYER, citizens of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Bundle-Wrappers, whereof the following is a specification.

Our invention is intended, primarily, to be used for wrapping newspapers and other bundles for transmission through the mails, or by express; but it is not restricted to these uses as it may be employed for wrapping miscellaneous bundles. One of its objects is to provide a strong and serviceable wrapper which may be readily applied, without the annoyance of pasting or tying, which will effectually hold the bundle together, and which may be easily undone without mutilation.

A further object is to provide a convenient mailing wrapper, which may be readily opened for inspection by the authorities, and which may as readily be refastened, without injury to itself, or to the inclosure.

Generally it may be described as a tag adapted to receive the address, and having attached to it one or more strings with which to fasten the bundle together, the free ends of the strings being finally secured by suitable fastenings on the tag, the friction or pressure of which holds them from becoming loosened.

The invention may be embodied in many diverse forms, without departing from its essential principles. For instance, the string may be wound around the bundle, or it may be simply stretched across it and fastened to the other edge of the tag, or it may be laced back and forth a number of times, across the bundle from one side of the tag to the other, and then fastened; or, instead of a string, any substitute may be employed, as for instance a wire, or a rubber band.

In the following specification and claims, we have used the generic word "cord," to cover a string, or any of the equivalents therefor.

The drawings illustrate what we consider the preferable forms of the invention.

Figure 1 shows four different views of the wrapper, A being an obverse view, B being a reverse view, C being a view of a wrapped

bundle, D being an enlarged end view of the wrapper rolled up.

Fig. 2 is an enlarged view of one end of a wrapper similar to Fig. 1, but with holes *d* punched through the card in such manner as to leave the lips *l* free.

Fig. 3 is a modification of the wrapper shown in Fig. 1, A being an obverse face view, C being a view of a wrapped bundle, showing the manner of lacing and fastening the cord.

Fig. 4 is a modification of Fig. 3 adapted to heavier bundles, the cord being laced four times across the breech instead of but twice as in Fig. 3. A is an obverse face view showing the arrangement and distribution of the lips. C is the wrapped bundle.

Fig. 5 is a tag or wrapper employing three independent cords instead of a single string. A is an obverse view. C is a wrapped bundle.

The wrapper consists of a single sheet of tough cardboard, or thick, strong paper, to one end of which is attached the cord, or cords which are to bind the bundle together. This end of the card we call the head of the wrapper, while we designate the opposite end as the tail. In wrapping a bundle the head of the card is always made to overlap the tail as shown in the drawings.

A number of cuts as Fig. 1 are made through the card. Each of these cuts is bent or curved so as to inclose an area except on one side, thus forming a little lip joined to the body of the card by a neck or isthmus which serves as a hinge. As shown in Fig. 1, these lips are all formed in such position that when the card is wrapped around the bundle the axes of their hinges are all parallel to the axis of the bundle. When this is the case each lip will spontaneously assume a tangential position when the bundle is wrapped. See *L*<sup>1</sup>, *L*<sup>2</sup>, *L*<sup>3</sup>, and *L*<sup>4</sup>, in Fig. 1 D. These lips then form little hooks around which the cord may be laced. The cord wedges itself tightly under the lips and into the cuts, the pressure thereby generated serving to hold it from slipping.

Instead of forming the lips by making simple cuts through the card as explained above and as shown in Fig. 1, they may be formed as shown in Fig. 2, namely, by punching a piece of material entirely out of the card leav-

ing a hole  $d$  Fig. 2. This method has some advantages. It leaves the lip free so that it is more certain to spring out tangentially when the bundle is wrapped. It also leaves  
5 a wider opening for the entrance of the string beneath the lip in lacing.

The lips may be distinguished as of two kinds—primary and secondary. By primary lips, we mean those which serve as main lacing  
10 hooks and bear the direct strain due to the effort of the bundle to unwrap. The secondary lips serve merely as lacing and fastening hooks to use up and hold the surplus length of string. They are not absolutely essential,  
15 although we consider them very desirable.

The primary lips we have indicated on the drawings by a capital L, while the secondary lips are marked by a small  $l$ .

Referring to Fig. 1, it will be seen that the cord is attached to one corner of the card and that, ranged along the head end of the wrapper, are three lips—one primary lip L  
20 and two secondary lips  $l'$  and  $l''$ . On the tail of the wrapper are three parallel series of primary lips,  $L'$ ,  $L''$ ,  $L'''$ . The object of having several series of these lips is to make the wrapper adaptable to bundles of various diameters. Whether the roll be large or small, one  
25 of the series of lips  $L'$ ,  $L''$ ,  $L'''$ , will fall close to the head of the card when it is wrapped around the bundle.

The method of fastening is as follows, (see Fig. 1:) The cord is drawn from its initial or fixed point, across the breech, laced under  
35 the nearest series of lips on the tail, then back across the breech and around and under lip L on the head of the card, and finally around and under lips  $l'$ ,  $l''$ , until it ends. (See Fig.  
40 1, C.) It wedges tightly into the cuts, the pressure of which, especially when their number is multiplied, holds it securely. The length of the cord and the distance between the consecutive series of lips on the tail are  
45 so proportioned that, no matter what the size of the bundle may be, the cord will always be long enough to reach under all of the secondary lips and will never extend an inconvenient distance beyond the last one. This obviates the necessity of breaking it, and avoids  
50 a troublesome end.

In Fig. 2 is shown an improved form for the final secondary lip  $l''$ . The improvement consists in making the final end  $a'$  of the generating cut curve around so as to point approximately toward the initial end  $a^0$  of the same cut. The object is to have the final end of the cut approximately in the line of the stretched cord when it is fastened in the cut.  
55 Thus the tension of the cord draws it more deeply, and hence more tightly into the cut, thereby adding to the holding power.

Fig. 3 differs from Fig. 1 only in the form and arrangement of the primary lip L and the  
60 secondary lips  $l'$ ,  $l''$ ,  $l'''$ . These latter do not open tangentially, but in an axial direction.

Consequently they will not spring out spontaneously when the bundle is wrapped, but they must be permanently bent outward when the tag is made.

Fig. 4 differs from the preceding only in having in the center of its overlapping edge an additional primary lip  $L^0$  which permits the cord to be laced four times across the breech instead of twice as in Fig. 3. This wrapper is  
75 especially adapted for heavy bundles as the extra passages of the cord add greatly to its holding power.

Fig. 5 shows a tag provided with three independent short strings. It needs no explanation.

The lips may be arranged in many different ways to adapt them to a variety of styles of lacing. The construction may also be varied to a considerable extent as may likewise the  
85 material. A stronger tag may be made out of paper and muslin glued together, or the lips only of the tag may be reinforced by a backing of muslin. The lips may be pasted on or otherwise attached, instead of being formed  
90 in the sheet itself, or a button, or any suitable lacing hook may be attached to the tag in lieu of the lips. We have, however, illustrated and described those constructions and arrangements which we at present prefer.

Referring to the drawings, it will be seen that on the wrapper there is a clear space which can never be covered or obscured in the wrapping of the bundle. The address is written in this space, and the stamp attached  
100 in the upper right-hand corner, preferably before the bundle is wrapped, as then the wrapper is a flat card, as easily written upon as any other card. The fact that the wrapper is more easily removed from the bundle by unlacing the string than by mutilating the wrapper renders the corresponding reverse face particularly valuable for the display of an advertisement; or by fixing the necessary postage, this reverse face may be used to convey a message  
105 in the manner of a postal card.

Having now described our invention, what we claim is—

1. A bundle wrapper consisting of a flexible wrapper adapted to encircle or to partially encircle the bundle; on the head end of the wrapper a cord permanently attached thereto, and also a number of fastenings for the cord, these fastenings being partly primary or lacing fastenings, and partly secondary or retaining fastenings; on the tail of the wrapper a number of fastenings, all primary, arranged in series, each series being located a little farther from the tail end of the wrapper than is the preceding series, so that either series may be used,  
120 according to the size of the bundle being wrapped, substantially as specified.

2. In a bundle wrapper of the kind specified, provided with lips as described; the final lip having the last end of its generating cut  
130 curved around so as to point approximately toward the starting point of the same cut, so

that the stretched cord as it lies under the lip shall be approximately in the continuation of the line of the cut which retains its end substantially in the manner and for the purpose  
5 set forth.

3. A bundle wrapper, consisting of a single sheet of flexible material adapted to encircle or to partially encircle the bundle and having near its head and tail ends curved or bent  
10 cuts, made through it in such manner as to form a number of lips each of which is connected with the body of the wrapper by a neck or isthmus forming a hinge, the bending lines of the hinges being parallel to the axis of the

bundle so that when the wrapper is rolled 15 about the bundle the lips will spontaneously assume a tangential direction; a binding cord attached to one end of the wrapper and intended to be laced back and forth across the breech, around and under the tangentially 20 projecting lips which serve as lacing and retaining hooks, substantially as specified.

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