

Feb. 27, 1934.

T. L. SALSMAN

1,949,259

WOUND ROLL

Filed April 22, 1933

Fig. 1

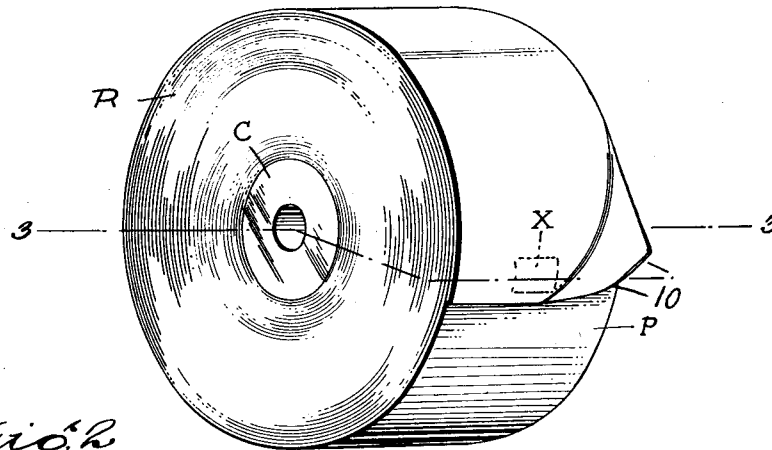


Fig. 2

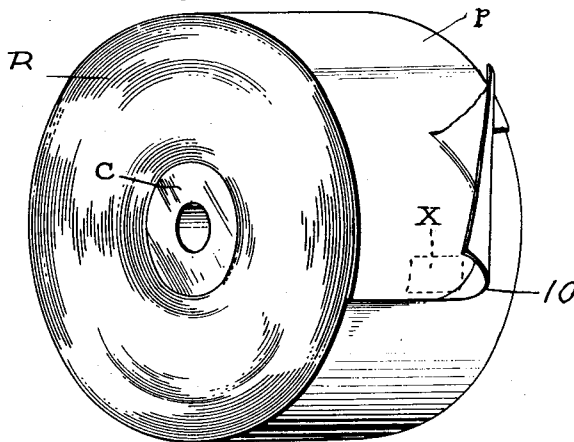


Fig. 3

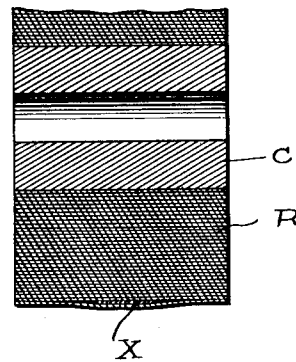
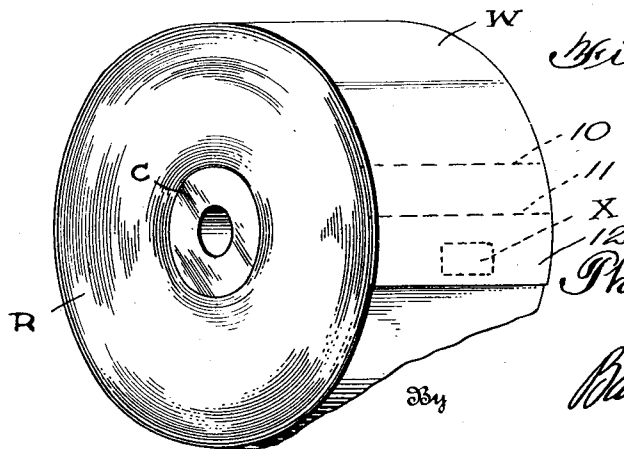


Fig. 4



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UNITED STATES PATENT OFFICE

1,949,259

WOUND ROLL

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2 Claims. (Cl. 206—58)

- This invention relates to a wound paper roll whose outer end is formed into a wrapper therefor. A roll of this kind is suitable for use with various recording devices, such, for example, as adding machines, and the principal object of my invention is to securely fasten the outer convolution or wrapper of the wound roll in such manner that it may be easily and quickly torn and removed, when desired, without damage or injury to the roll which it is designed to protect. This and other objects which will hereinafter appear may be attained by a construction such as is suggested in the accompanying drawing wherein:
- 15 Fig. 1 is a view in perspective of a wound roll of paper having the outer convolution secured by a spot of adhesive in accordance with the instant invention, and showing one of the unsecured corners of the paper strip turned away from the surface of the roll to effect tearing of the strip from edge to edge inwardly of the spot.
- 20 Fig. 2 is a view similar to Fig. 1 showing the manner in which the paper strip tears along a line substantially parallel to the axis of the roll when the free corner of the strip is further turned about the spot as a pivot;
- 25 Fig. 3 is a longitudinal section through the roll showing the adhesive spot securing the outer convolution or wrapper of the wound strip; and
- 30 Fig. 4 is a fragmentary view of a roll such as shown in Fig. 1, having a wrapper of relatively heavy paper secured to the end of the wound paper strip, the end of the wrapper being secured by a spot of adhesive in the manner and for the purpose illustrated in Figs. 1 and 2.
- 35 The wound roll R, as illustrated best in Figs. 1 and 2, consists of plural convolutions of a paper ribbon *p* which ends at 10. It may be wound around and upon a core or spool C which desirably remains in place to assist in the subsequent use of the roll. A separate wrapper W, in the form of a paper ribbon, having by preference the same width as the roll although somewhat heavier than the paper in the roll, may be applied over the outer convolution thereof to protect and secure the end portion of the roll. This wrapper, as shown in Fig. 4, is of a length slightly greater than the circumference of the wound spool, and its inner end portion 11 is so placed as to lie close to, but spaced definitely from, the end 10 of the paper roll. As by adhesive applied across the paper ribbon in the regions marked *a* and *b*, the inner end of the wrapper is anchored to the outer convolution of the wound roll at a point slightly removed from its free end 10. The attached wrapper so disposed is then carried around the outermost convolution of the roll and past its free end to lap over the anchored end of the wrapper. Finally the outer end 12 of the wrapper is secured at the spot *x* over its lapped end 11 by the application of a suitable adhesive, such as paste or glue in the manner shown in Fig. 1.
- 60 A wrapper which surrounds a wound roll of paper is, of course, not new, but the securement of the end of such a wrapper or wound strip in the manner described is novel and advantageous in certain respects. In the first place, the inner end of the wrapper when anchored to the outermost convolution of the wound roll, permits securement of its outer end to a lapped part of the wrapper without danger of slipping either during the wrapping process or subsequently; and, secondly, the attachment of the outer end of the wound strip or wrapper by spot adhesion makes for a fastening which is both secure, yet permits edge to edge tearing of the secured strip inwardly of the spot without the use of special tools. Such a spot fastening, which is desirably confined to the center of the wound strip or wrapper ribbon adjacent its outer end, holds the wrapper tightly in place, the free corners of the wrapper lying close to the adjacent convolution thereof at every point longitudinally of the roll due to the intermediate spot connection and curvature of the roll. The effect of secure fastening is much the same as though the adhesive were applied clear across the roll. However, the spot fastening, as herein disclosed, is greatly to be preferred to any such continuous adhesion, for it provides a securement which is amply strong, and also tight and close along the end of wrapper from edge to edge thereof, without sealing the wrapper end adjacent such edges. This is an important feature in connection with measures to be taken for removing the wrapper preliminary to use of the wound roll. Where the wrapper is fastened in place continuously across its outer end, much difficulty is ordinarily encountered in breaking such connection. Frequently, one or more of the adjacent convolutions of the paper roll are spoiled in freeing the wrapper from the roll. But with a spot fastening such as I have devised, an unsealed corner portion of the wrapper end may easily be lifted and turned away from the curved surface of the roll, forming an oblique line of flexure from one side of the spot to a point at an edge of the roll inwardly of the spot with respect to the secured end of the roll. Upon further turning movement of the corner portion of the paper is caused

to tear, from the point where the oblique line of flexure meets an edge of the roll, about the spot as a pivot, or in other words inwardly of the spot towards the opposite edge of the roll. Upon
5 thus tearing the outer convolution from edge to edge, the roll may be unwound for one convolution and torn or cut off, thereby removing the wrapper layer entirely and placing the roll in condition for use.

10 In Fig. 4 the wrapper constitutes, in effect, an extension of the outer convolution of the wound roll shown in Fig. 1. In cases where the paper forming the roll is itself suitable to afford protection to the inner convolutions, I utilize the
15 outer convolution of the roll for a wrapper, thereby dispensing with the attachment of an extension piece. While I have shown and described but two embodiments of my invention, it is to be understood that it is capable of further modifications. Changes, therefore, in the construction and arrangement may be made which do not
20 depart from the spirit and scope of the invention as disclosed in the appended claims.

I claim:

25 1. A wound paper roll having its outer end extending closely over the next adjacent convolution for the full width of the roll and connected thereto by a spot of adhesive which is confined to an area intermediately of the ends of the
30 roll, the roll edge at its outer end extending substantially in a straight line lengthwise of the roll with the corners adjacent the end unsecured with all fitting close to the next adjacent convolution of the roll, whereby one of said corner por-

tions may be turned away from the curved surface of the roll and forms an oblique line of flexure which meets an edge of the roll at a point inwardly of the spot with respect to the outer end of the paper, from which point the paper may be
80 torn along a line substantially parallel to the axis of the roll by further turning of the corner portion.

2. A wound paper roll to the free end of which is attached an extension forming a wrapper
85 which continues circumferentially through at least 360°, the wrapper being of the same width as the roll whereby its edges lie flush with the ends of the roll, and the free end of the wrapper being flat upon the roll and tight against the
90 next adjacent convolution thereof, and means securing the free end of the wrapper in place consisting of a spot of adhesive confined to a restricted area upon the under face of the wrapper adjacent its free end and remote from its opposite sides, the wrapper edge at its outer end being
95 fitted closely upon the next adjacent convolution of the roll from end to end thereof, and the corners of the wrapper adjacent its free end being unsecured, whereby one of said corner portions may be turned away from the curved surface of the roll and forms an oblique line of flexure which meets an edge of the roll at a point inwardly of the spot with respect to the outer
100 end of the paper, from which point the paper may be torn along a line substantially parallel to the axis of the roll by further turning of the corner portion.
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THOMAS J. SALSMAN.

to tear, from the point where the oblique line of flexure meets an edge of the roll, about the spot as a pivot, or in other words inwardly of the spot towards the opposite edge of the roll. Upon thus tearing the outer convolution from edge to edge, the roll may be unwound for one convolution and torn or cut off, thereby removing the wrapper layer entirely and placing the roll in condition for use.

10 In Fig. 4 the wrapper constitutes, in effect, an extension of the outer convolution of the wound roll shown in Fig. 1. In cases where the paper forming the roll is itself suitable to afford protection to the inner convolutions, I utilize the outer convolution of the roll for a wrapper, thereby dispensing with the attachment of an extension piece. While I have shown and described but two embodiments of my invention, it is to be understood that it is capable of further modifications. Changes, therefore, in the construction and arrangement may be made which do not depart from the spirit and scope of the invention as disclosed in the appended claims.

I claim:

25 1. A wound paper roll having its outer end extending closely over the next adjacent convolution for the full width of the roll and connected thereto by a spot of adhesive which is confined to an area intermediately of the ends of the roll, the roll edge at its outer end extending substantially in a straight line lengthwise of the roll with the corners adjacent the end unsecured with all fitting close to the next adjacent convolution of the roll, whereby one of said corner por-

tions may be turned away from the curved surface of the roll and forms an oblique line of flexure which meets an edge of the roll at a point inwardly of the spot with respect to the outer end of the paper, from which point the paper may be torn along a line substantially parallel to the axis of the roll by further turning of the corner portion.

2. A wound paper roll to the free end of which is attached an extension forming a wrapper which continues circumferentially through at least 360°, the wrapper being of the same width as the roll whereby its edges lie flush with the ends of the roll, and the free end of the wrapper being flat upon the roll and tight against the next adjacent convolution thereof, and means securing the free end of the wrapper in place consisting of a spot of adhesive confined to a restricted area upon the under face of the wrapper adjacent its free end and remote from its opposite sides, the wrapper edge at its outer end being fitted closely upon the next adjacent convolution of the roll from end to end thereof, and the corners of the wrapper adjacent its free end being unsecured, whereby one of said corner portions may be turned away from the curved surface of the roll and forms an oblique line of flexure which meets an edge of the roll at a point inwardly of the spot with respect to the outer end of the paper, from which point the paper may be torn along a line substantially parallel to the axis of the roll by further turning of the corner portion.

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CERTIFICATE OF CORRECTION.

Patent No. 1,949,259.

February 27, 1934.

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It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 2, first column, line 33, for the words "with all" read withal; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 17th day of December, A. D. 1935.

Leslie Frazer

Acting Commissioner of Patents.

(Seal)