

Sept. 9, 1941.

I. STONE

2,255,456

TAPE ROLL HOLDER AND DISPENSER

Filed Jan. 4, 1939

2 Sheets-Sheet 1

Fig. 1

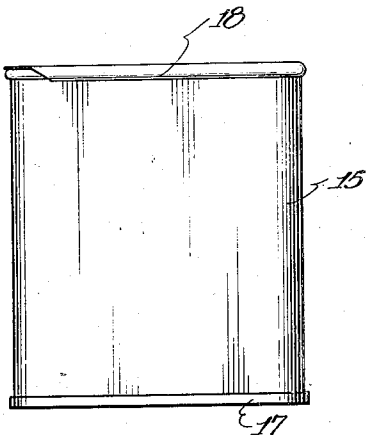


Fig. 3

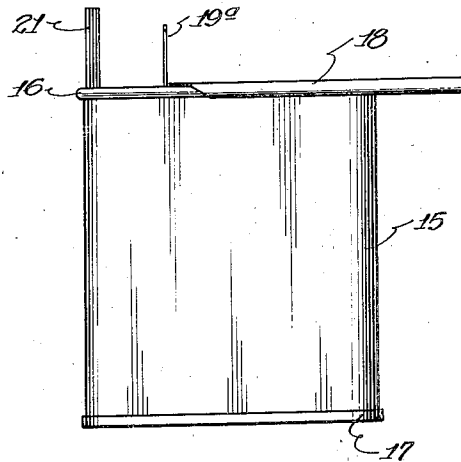


Fig. 2

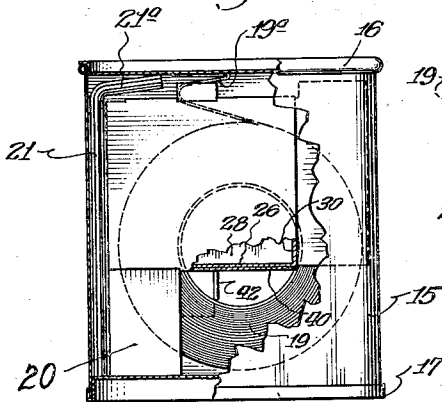


Fig. 4

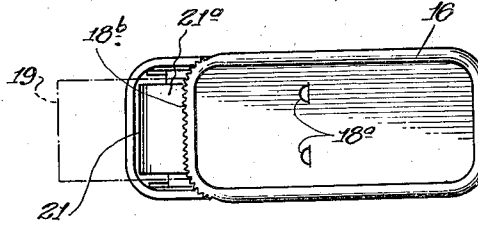
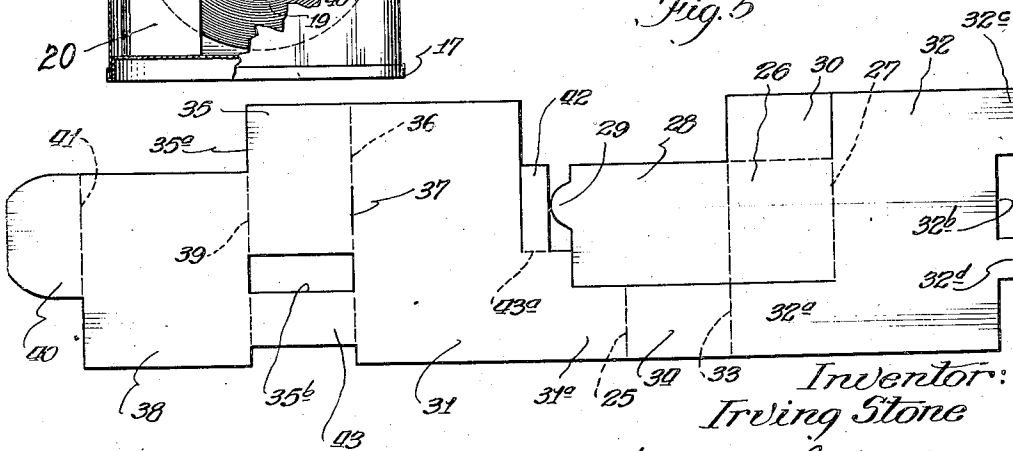


Fig. 5



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Sept. 9, 1941.

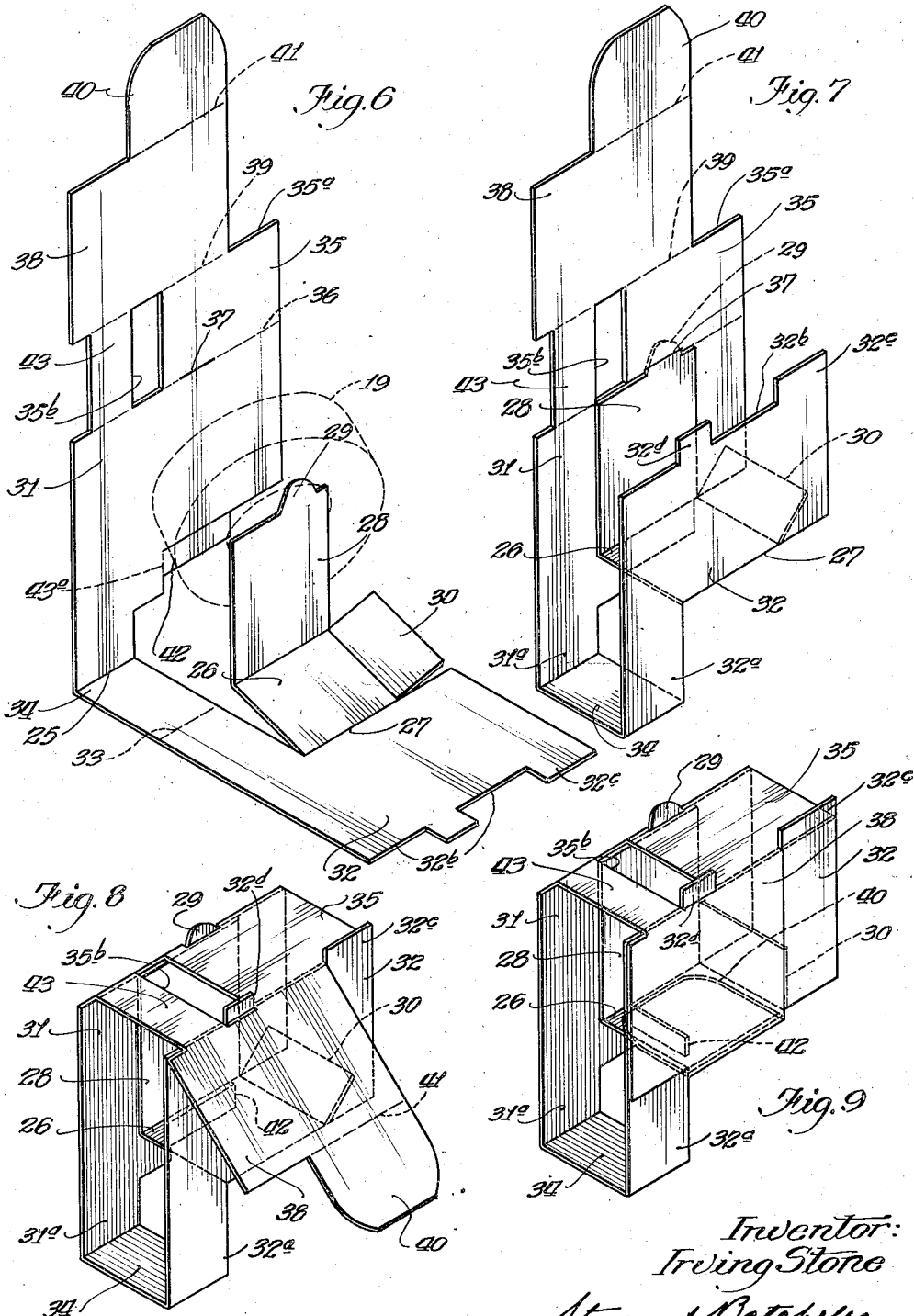
I. STONE

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TAPE ROLL HOLDER AND DISPENSER

Filed Jan. 4, 1939

2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

2,255,456

TAPE ROLL HOLDER AND DISPENSER

Irving Stone, Chicago, Ill.

Application January 4, 1939, Serial No. 249,309

10 Claims. (Cl. 206—52)

My invention relates to rolls of paper or fabric tape of such varieties as cohesive gauze tape, adhesive tape, gauze tape, masking tape, or electrician's tape, and more particularly to means for holding and dispensing the same, and my main object is to provide a holder which is enclosed and from which the tape may be dispensed.

A further object of the invention is to provide a holder of the above character which includes means for easily severing the dispensed portion of the tape from the balance.

A still further object of the invention is to provide a holder of the above character with provision for enclosing a circular or other paper of a descriptive or instructional character in connection with the tape contents.

Another object of the invention is to provide the novel holder with a closure which allows first access to the circular or paper previously mentioned when opened, to require the removal and encourage the reading thereof before the tape is dispensed or used.

Another object of the invention is to construct the novel holder in a manner to retain the tape roll within it fully confined and protected against the entrance of air or dust, yet not to require the removal or unwrapping of any part when a portion of the tape is to be dispensed.

An additional object of the invention is to include in the novel holder a support for the tape not formed as a reel but satisfactorily serving as one.

A further object of the invention is to construct the support or carrier for the tape roll from a single piece of uniquely-folded cardboard.

An important object of the invention is to design and assemble the same in a manner to make its manufacture economical and satisfy all requirements of utility and sanitation.

With the above objects in view, and any others which may suggest themselves from the description to follow, a better understanding of the invention may be had by reference to the accompanying drawings, in which—

Fig. 1 is a side elevation of the novel holder in the closed state;

Fig. 2 is a view similar to Fig. 1, partly broken away to show the contents of the holder;

Fig. 3 is a similar view, showing the holder partly opened and with the tape ready to be dispensed;

Fig. 4 is a top plan view of the showing in Fig. 3;

Fig. 5 is a plan view of the blank from which the tape roll carrier is made;

Fig. 6 is a perspective view of the blank as initially formed to receive the tape roll; and

Figs. 7 to 9 are similar views showing further progress in the folding of the blank to assume the form of the carrier.

Rolls of adhesive tape, gauze tape and the like are usually sold in wrappers and sometimes enclosed in cartons to keep clean. When the tape is to be used or dispensed, it is necessary to open the package and outer wrapper, and sometimes an inner one before the tape is exposed; and the roll thereof must then be held in the hand while some of the tape is uncoiled. Then one hand is employed to get the scissors or knife for cutting the amount of tape required off; and finally the hands must again be used to handle the roll and wrap it up. Where the tape is for sanitary or bandage purposes, it will be appreciated that the process just described not only takes considerable time and care, but also subjects the roll of tape to contamination or soiling from the hands, so that it is not in the original or sterilized state when used. It has been my intention in designing the novel tape roll holder to correct the above condition and enable the tape to be dispensed quickly and cleanly, and maintain the balance in its original or sterilized state at all times.

In accordance with the foregoing, specific reference to the drawings indicates the holder primarily as a container 15. This container is preferably a box having a reinforced top 16 and bottom 17. The top and bottom are of metal, but the walls may be either of metal or pasteboard as expediency may dictate. The retainer is of rectangular form and relatively narrow to follow the proportions of a typical roll of tape; and it is provided with a sliding lid 18 punched with inward tongues 18a to prevent it from being fully pulled off when drawn open.

Fig. 2 shows the container 15 broken away sufficiently to disclose the tape roll at 19 and the carrier therefor at 20. It is seen that the outer end portion 19a of the tape is in a fold under the lid 18; also, the carrier is sufficiently spaced from the front of the container to permit the lodging of a folded circular or descriptive paper 21 in the intervening space. The circular is designed of a length to be bent back at the top under the lid 18, as shown at 21a, the lid thus serving to hold the circular in place. However, when the lid is drawn back as indicated in Figs. 3 and 4, the tension of the bend 21a is relieved, so that the circular projects upwardly from the container as indicated in Fig. 3. It is thus in

front of and directly in the way of the tape end portion 19a which has also risen into view, so that the user is prompted to pull out the circular and refer to its instructions before drawing on the tape. When the latter action is taken and a sufficient length of tape pulled out, the lid 18 is again closed. However, the closing edge of the same is serrated or toothed as indicated at 18b in Fig. 4, so that this edge closes on the tape and serves as a cutter to sever the dispensed portion thereof when the same is given a lateral tug. As noted in Fig. 1, the extreme or serrated edge of the lid overlies the free edge of an end wall of the box top 16 when closed. By closing on the tape—as mentioned—the under-surface of the lid adjacent said edge holds or clamps the tape to the free edge of said wall, so that the severed end of the tape is held at the point of issue and cannot drop away out of reach and start the unwinding of the roll. In this connection it is noted that the serrated edge 18b is continued with serrated and rounded corners to pin the gauze, so that it will not gather and resist severing.

The tape roll carrier 20 supplants the reel usually employed for the purpose and is an improvement thereover by being made from a single blank of cardboard instead of in the usual circular form and of metal. The present carrier is rectangular for the most part, so that it cannot turn when the tape is drawn from it; and it is in a form to exert a moderate degree of friction upon the tape roll, so as to steady the same as it turns during the dispensing of the tape.

The blank from which the carrier is formed is shown in Fig. 5 with solid lines denoting the places where it is cut, while long-dotted lines indicate the places where it is creased or scored. Initially the blank is folded at right angles on the line 25 to appear as in Fig. 6. An extension 26 is also bent up to a partial degree from the line 27 and continued upwardly with a wing 28 terminating with a tab 29. The section 6 also has an up-bent side wing 30.

The extension 28 serves as a lead for the threading of the tape roll 19 to a point where it receives the section 26 and the side wing 30 within it. The section 31 now serves as one side wall of the carrier, while the opposite section 32 is folded up on the line 33 to serve as the companion side wall therefor, as shown in Fig. 7. The roll of tape is not shown in this and the subsequent figures for the sake of clarity, but its position may be understood from Fig. 2.

With the carrier formed to the extent shown in Fig. 7, the lower portions 31a and 32a of the wall portions 31 and 32 form a foot in conjunction with a bottom section 34 to support the carrier in the bottom of the container 15. This foot occurs in the front of the latter, but no rear support is necessary because when the roll is full it is of a sufficient diameter to reach to the bottom of the container; and when the roll has diminished in size it will be too light to affect the stability of the carrier, particularly when it is considered that the back wall of the container also forms a stop against the recession of the carrier.

The carrier formed to the extent so far described offers a support and lateral confines for the tape roll, and it is now necessary to strengthen the carrier and render it stable. For this purpose an extension 35 of the wall 31 is folded toward the wall 32 on the line 36, to the extent of obtaining a rest or support on the top edge 32b

of the wall 32. The top edge 35a of the extension 35 will abut the inner side of an extension 32c of the wall 32 to form a spacer for the two walls. The wall 32 also has a tongue 32d extending along one end of a slot 35b formed in the extension 35, thus preventing the wall 32 from outward departure in relation to the wall 31. The folding zone of the line 36 includes a slit 37 through which the tab 29 passes as the extension 35 is folded across, this action serving to station and support the extension 28.

The carrier now appears as in Fig. 8, and a continuation 38 of the extension 35 is now foldable downwardly on the line 39 to form a double section for the wall 32 in the manner indicated in Fig. 9. The continuation 38 carries a final tongue 40 which is now folded under on the line 41 to form a double portion for the section 26. As the latter is to a considerable extent the support for the tape roll 19, the reinforcement for it by means of the tongue 40 is locked in the horizontal position by a cross wing 42 carried by the wall 31 and foldable inwardly on the line 43 to appear as in Fig. 9. Incidentally, the side wing 30 is also bent to a vertical position as seen in this figure to form an internal frame for the support and guidance of the tape roll.

The top of the carrier as now constituted provides the slot 35b for the passage of the tape portion 19a to the zone of access. The cross bar 43 occurring in front of the slot forms a stop or rest for the extended portion of the tape to prevent such portion from dropping back on the roll after the lid is drawn open. The end of the tape is thus handily available at all times, and when the same is pulled for the dispensing of a length of tape the roll finds a substantial bearing on the frame composed of the portions 26 and 30.

It will be evident from the above description that I have provided in the novel tape roll holder a container in combination with a carrier or bearing to both encase the tape roll against contamination from external sources or handling and to give the roll a support for rotation without the use of a reel. Thus, only that portion of the tape which is dispensed is exposed, and the balance thereof remains in a clean and sanitary condition. The container is of a nature to be made by standard methods at a very low cost; and this applies with even more emphasis in the case of the carrier, since the same can be stamped by a die from inexpensive paper stock and without appreciable loss, making its cost fractional as compared with that of a metal reel. Moreover, the carrier is formed in a manner to be substantial and fortified against dismembering and distortional strains, and is reinforced by doubled formation where strength is required. Altogether, the novel holder is an article of simplicity and utility, and is a radical advance over methods now employed for the packing or dispensing of tapes of the types mentioned.

While I have described the invention along specific lines, various minor changes and refinements may be made without departing from the principle of the invention, and I desire to consider all such changes and refinements as coming within the scope and spirit of the appended claims.

I claim:

1. A support on which a tape roll is rotatably disposed comprising a receptacle of folded sheet material, and a center bearing for the roll forming part of the receptacle, said receptacle having side walls, and said bearing comprising a cross-

section extending from one wall to the other, an upward wing extending from one end of said section, and an upward extension from said section to line and reinforce the other one of said walls.

2. A support on which a tape roll is rotatably disposed comprising a receptacle of folded sheet material, and a center bearing for the roll forming part of the receptacle, said receptacle having side walls, and said bearing comprising a cross-section extending from one wall to the other, and a tongue bent from the opposite wall to occupy a transverse position beneath said section for supplementing the support of the same.

3. A support on which a tape roll is rotatably disposed comprising a receptacle of folded sheet material, and a center bearing for the roll forming part of the receptacle, said receptacle having side walls, downward extensions at one of the ends thereof to form feet, and a common bottom section for the extensions.

4. A support on which a tape roll is rotatably disposed comprising a receptacle of folded sheet material, a center bearing for the roll in the bottom of the receptacle, the latter having side walls, a top for the receptacle over the space in which the tape roll is disposed, said top being a fold from one wall over the other, and a downward continuation of said top fold applied to the outer side of said other wall to reinforce the same.

5. A support on which a tape roll is rotatably disposed comprising a receptacle of folded sheet material, a center bearing for the roll in the bottom of the receptacle, the latter having side walls, a top for the receptacle over the space in which the tape roll is disposed, said top being a fold from one wall over the other, a downward continuation of said top fold applied to the outer side of said other wall to reinforce the same, and a tab extended from said continuation and folded under the receptacle to form a reinforcement for the bottom thereof.

6. A support on which a tape roll is rotatably disposed comprising a receptacle of folded sheet material, a center bearing for the roll in the bottom of the receptacle, the latter having side walls, a top for the receptacle over the space in which the tape roll is disposed, said top being a fold from one wall over the other, a downward continuation of said top fold applied to the outer side of said other wall to reinforce the same, a tab extended from said continuation and folded under the receptacle to form a reinforcement for the bottom thereof, and a tongue extended trans-

versely from the first named wall to underlie said folded extension.

7. A support on which a tape roll is rotatably disposed comprising a receptacle of folded sheet material, a center bearing for the roll in the bottom of the receptacle, the latter having side walls, and a top for the receptacle over the space in which the tape roll is disposed, said top being a fold from one wall over the other and having a cross-slot in a position for the upward passage of a length of tape taken from the roll.

8. A support on which a tape roll is rotatably disposed comprising a receptacle of folded sheet material, a center bearing for the roll in the bottom of the receptacle, the latter having side walls, a top for the receptacle over the space in which the tape roll is disposed, said top being a fold from one wall over the other and having a cross-slot in a position for the upward passage of a length of tape taken from the roll, and a tongue extended from said other wall upwardly through the corresponding end of the slot to lock said wall from outward departure.

9. A support on which a tape roll is rotatably disposed comprising a receptacle of folded sheet material, and a center bearing for the roll forming part of the receptacle, said receptacle having side walls, and said bearing comprising a cross-section extending from one wall to the other, an upward extension from said section to line and reinforce the other one of said walls, a top for the receptacle extending from such other wall as a cross-bend upon the first mentioned wall, the corner of said other wall with the top having a slit, and a tab projected upwardly from said extension through the slit to lock the extension to said other wall.

10. A tape dispenser comprising an upright container for a roll of tape, the walls of the container forming an open top of substantially rectangular form, the said top being rolled to form rim portions at the sides and one end, a lid longitudinally slidable on said top and with formations along the sides to receive the lateral rim portions, one end of said lid being formed as a serrated edge to clamp a ply of tape being taken from the container upon the terminal rim portion, such edge also serving as a cutter for severing the outer portion of said ply, said end of the lid having rounded and serrated corners meeting the sides of the lid, and such corners serving to pin the gauze against gathering when drawn sidewise for the severing action.

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