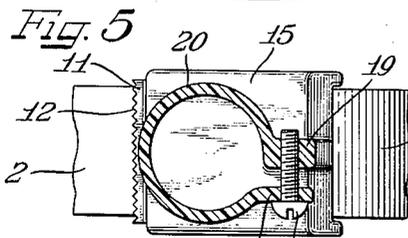
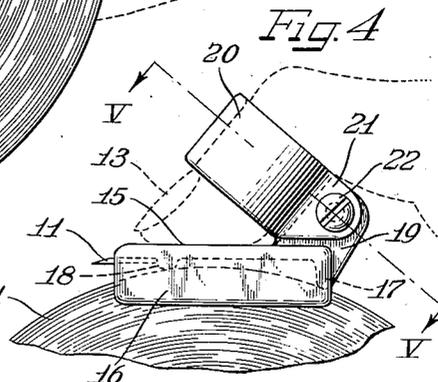
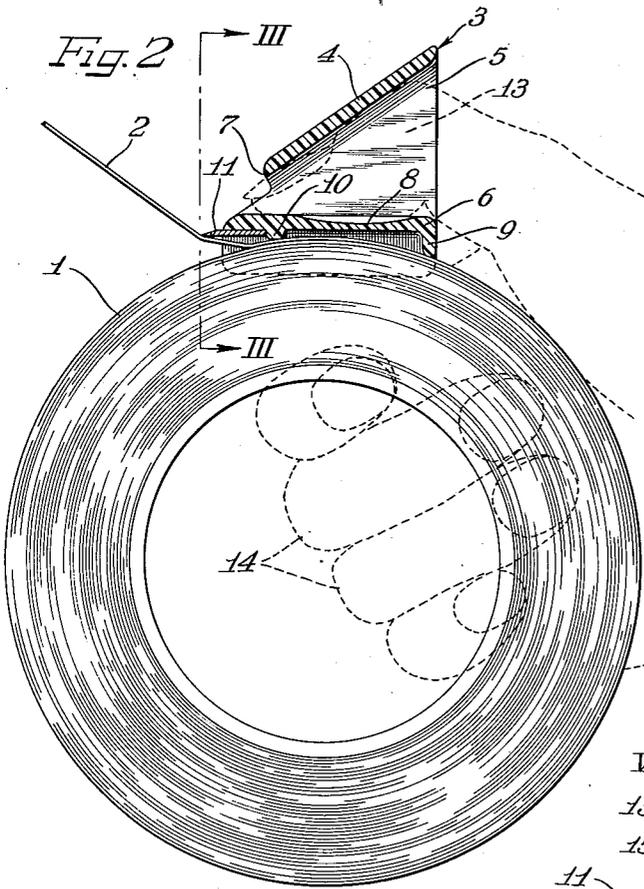
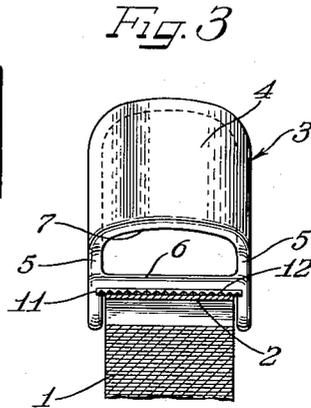
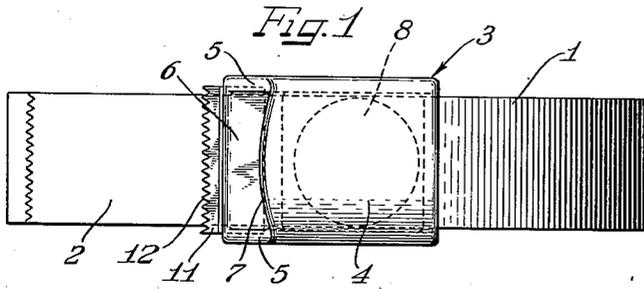


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FINGER HELD TAPE CUTTER

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# UNITED STATES PATENT OFFICE

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## FINGER HELD TAPE CUTTER

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1 Claim. (Cl. 164—84.5)

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This invention relates to improvements in a finger held tape cutter, and more particularly to a cutting device which may easily be carried on the finger or thumb of a user, and successfully utilized for the severance of sections of tape of desired length from a roll of adhesive tape or the like, although the device may have other uses and purposes as will be apparent to one skilled in the art.

The instant application is a continuous-in-part of my copending application entitled "Tape Cutter," filed April 16, 1949, Serial No. 87,919. Briefly the main difference between the two applications resides in the fact that the copending application discloses a tape cutter which may readily and easily be attached to a roll of tape, while the tape cutter set forth herein is one that attaches directly to the finger or thumb of the user.

As pointed out in my aforesaid copending application, tape cutting devices of the past have resulted in difficulty in the quick and easy severance of a section of tape from a roll, and that difficulty was increased where the body of the tape comprised a fabric rather than paper. Also, with devices such as those heretofore known difficulty was experienced, and added care in most instances and extra operations were necessary, in order to sever tape carrying a pressure sensitive adhesive, in order to avoid the free tape end attached to the roll from closely adhering to the roll and rendering it extremely difficult to pull off the next section of tape, and also in keeping the tape from buckling or folding so that the adhesive would engage upon itself. Obviously, appliances of the extraneous character, which would have to be picked up, operated, and then laid down to permit the next section of tape to be withdrawn from the roll, were objectionable in the delay and care required to obtain a free tape section. Likewise, cutting devices which physically carried the roll of tape were objectionably expensive, required added care in use, and necessitated re-loading at intervals when a roll of tape expired.

With these thoughts in mind, it is an important object of the instant invention to provide a simplified form of tape cutter which may readily and easily be slipped over the end of a finger or thumb and so carried by the user during a long course of separate tape severing operations.

It is a further object of this invention to provide a simple form of tape cutting device readily and easily carried on the finger or thumb of a user, and which device with but little pres-

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sure from the operator will readily sever either thin and fragile paper tape, or extremely tough fabric tape.

Also an object of the invention is the provision of a simple form of tape cutting device carried upon a digit of the user's hand and so constructed that when the roll of tape is grasped by the same hand carrying the device, the device may readily be positioned against the outer layer of the roll at the proper angle for severing a section of tape from the roll, and leaving the free end of tape still carried by the roll spaced from the layer of tape therebeneath in a position to be readily grasped for the next operation.

Still a further object of this invention resides in the provision of a simple form of tape cutter which may readily be carried upon a digit of the user's hand, and which may be held in operative position while the desired length of tape is withdrawn from the roll.

It is also a feature of this invention to provide a simple form of tape cutter that may readily be carried on a digit of the user's hand, and which device may be adjusted so as to more naturally and comfortably fit the selected digit of an individual user.

It is also a further feature of the invention to provide a simple form of tape cutting device, readily carried upon the hand of the user, which is highly durable, embodies no movable parts, and which is extremely light in weight.

While some of the more salient features, characteristics and advantages of the instant invention have been above pointed out, others will become apparent from the following disclosures, taken in conjunction with the accompanying drawing, in which—

Figure 1 is a top plan view of a tape cutter embodying principles of the instant invention showing the same in operative association with a roll of tape from which sections are to be removed;

Figure 2 is a side elevational view of the structure of Fig. 1, illustrating the cutting device in section, and showing the hand of the user in dotted lines to illustrate the proper operation of the device;

Figure 3 is a fragmentary transverse vertical sectional view taken substantially as indicated by the line III—III of Fig. 2, looking in the direction of the arrows;

Figure 4 is a fragmentary side elevational view of a somewhat different form of device embodying principles of the instant invention, indicating in dotted lines the association of the device with the hand of a user; and

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Figure 5 is a fragmentary sectional view of the structure of Fig. 4 taken substantially as indicated by the line V—V of Fig. 4.

As shown on the drawings:

Both illustrated embodiments of the instant invention are shown associated with a roll 1 of tape of which the free end of the top layer of the roll is indicated at 2. For illustrative purposes it may be assumed that the roll 1 comprises pressure sensitive adhesive tape having a fabric body. It will be understood, however, that the instant invention is not only usable with pressure sensitive adhesive tape, such as masking tape, binding tape, surgical tape, sealing tape, and the like, but the invention is equally adaptable and operates highly satisfactory with other forms of adhesive tape as well as with tape or ribbon carrying no adhesive whatever.

That illustrated embodiment of the invention seen in Figs. 1 to 3 inclusive includes a socket-like body portion, generally indicated by numeral 3, which may be molded from a thermoplastic or thermosetting plastic material, or which may be made from any other suitable material, plastic being highly satisfactory because of its lightness in weight. The body 3 comprises a forwardly and downwardly sloping wall 4, a pair of side walls 5—5 of substantially triangular configuration, and a base or platform 6. At the forward end of the body portion an opening 7 is provided through which the end of a thumb or finger of the user may extend, this opening providing adequate ventilation for the end of the digit inserted in the socket body. In its upper surface the platform 6 may be recessed as indicated at 8 to provide better holding action when the device is associated with the finger or thumb of a user and to make the device more comfortable.

As will be noted especially from the showing in Fig. 3, the side walls 5 depend below the platform 6 so as to engage the side faces of the tape roll 1 and prevent the device from slipping laterally off the roll when in use. As noted more particularly in Fig. 2, it will be seen that at the rear edge of the device there is transversely extending depending leg 9 which is shorter than the depending portions of the side walls 5—5, to rest upon the circumferential face of the tape roll. Near the forward edge of the device, there is a similar transverse leg 10, which is of less depth than the leg 9, and which also rests upon the circumferential face of the tape roll. These two legs 9 and 10 maintain the device at the proper angle for most facile cutting when the device is operatively associated with the tape roll.

Immediately forward seated against the shorter leg 10 is a cutting blade 11 embedded in the side walls or otherwise secured to the base of the platform 6, so that the forward or cutting edge thereof projects beyond the body of the device as clearly seen in Figs. 1 and 2. Preferably, the cutting edge is of a serrated or saw tooth character as indicated at 12, to better facilitate severance of fabric tapes. A tortuous edge of this kind also aids in keeping the free tape end attached to the roll from dropping into tight contact with the adjacent lamination of the roll.

In operation, the instant invention is extremely simple. It is merely necessary for a user to insert the end of a thumb 13 within the body of the device and grasp the tape roll in a natural gripping position as though the user were shaking hands with the roll. In this position, the fingers 14 of the user's hand will extend through the

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opening in the core of the roll and a firm grip is had upon the roll with the cutting device pressed solidly into position on the circumferential face of the roll. It is a simple expedient to maintain the device in this position, grasp the free tape end with the other hand, and withdraw tape from the roll to the desired extent. Then, a drawing of the tape against the edge of the knife 11 results in a quick and neat severance of the tape section. From the showing in the drawing it will be noted that the free tape end still attached to the roll will be elevated from the next layer of tape on the roll, and may readily be grasped by the hand of the user after a slight rearward movement of the cutting device. The cutting device may be worn for an indefinite length of time on the finger or thumb of the user and is entirely comfortable, especially due to its lightness in weight and the adequate flow of air through the device around the end of the user's digit.

That form of the invention illustrated in Figs. 4 and 5 is similarly constructed to the previously described modification of the invention in the lower portion thereof. This form of the invention includes a platform 15 having a pair of depending side walls 16 for engagement with the side faces of the tape roll. A rear leg 17 and a forward transverse leg 18 properly position the device in association with the circumferential face of the tape roll in the same manner as the legs 9 and 10 above described. The forwardly projecting knife 11 is of the same character as above described.

In this second embodiment of the invention, however, the finger socket element comprises a bracket 19 extending upwardly and outwardly at an angle to the rear portion of the base 15. Preferably integral with this bracket is a forwardly and downwardly inclined open loop 20 having a free end 21 projecting at an angle to the curvate body portion of the loop. Through this free end and through the adjacent part of the bracket 19 a bolt or equivalent tightening element 22 extends. It will be obvious that this bolt may be tightened or loosened to contract or enlarge the loop 21 so that it may readily be adjusted to fit the finger or thumb of a particular user. In operation, it is a simple expedient to adjust the bolt 22 so that the loop 20 is of a comfortable fit, insert the end of the finger or thumb through this loop as indicated in dotted lines in Fig. 4, and utilize the device for severing sections of tape in the manner above outlined with the previously described embodiment.

It will be especially noted that in either form, the invention is economical, highly durable, and simple to manipulate.

It will, of course, be understood that various details of construction may be varied through a wide range without departing from the principles of this invention and it is, therefore, not the purpose to limit the patent granted hereon otherwise than necessitated by the scope of the appended claim.

I claim as my invention:

In a tape cutting device, a platform having digit embracing means thereon, side flanges depending from said platform, front and rear legs depending from said platform transverse to said side flanges, and a knife embedded in said side flanges substantially parallel to and beneath said platform and seated against one of said legs, said knife extending forwardly of said platform and digit, whereby placing of said device upon the tape roll with the flanges and legs thereof in engagement

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with the side and circumferential faces respectively of said roll will position the knife for severing the tape in selective lengths.

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**REFERENCES CITED**

The following references are of record in the file of this patent:

6

**UNITED STATES PATENTS**

Number	Name	Date
197,857	Jameson -----	Dec. 4, 1877
421,665	Buchman -----	Feb. 18, 1890
1,444,976	Mandley -----	Feb. 13, 1923
1,946,731	Castain -----	Feb. 13, 1934
2,423,004	Butler -----	June 24, 1947