Dec. 29, 1953 K. GLEW 2,664,252

TAPE DISPENSER

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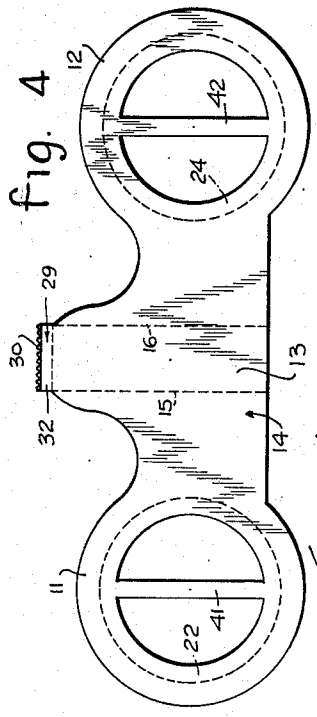


Fig. 4

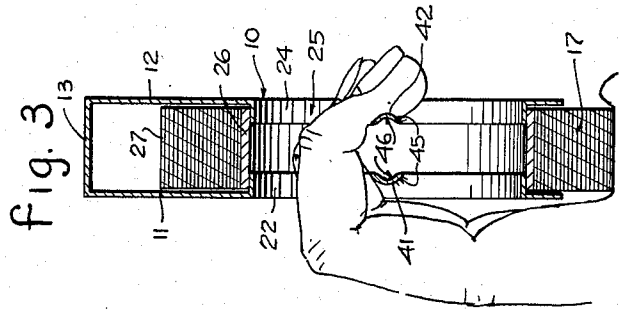


Fig. 3

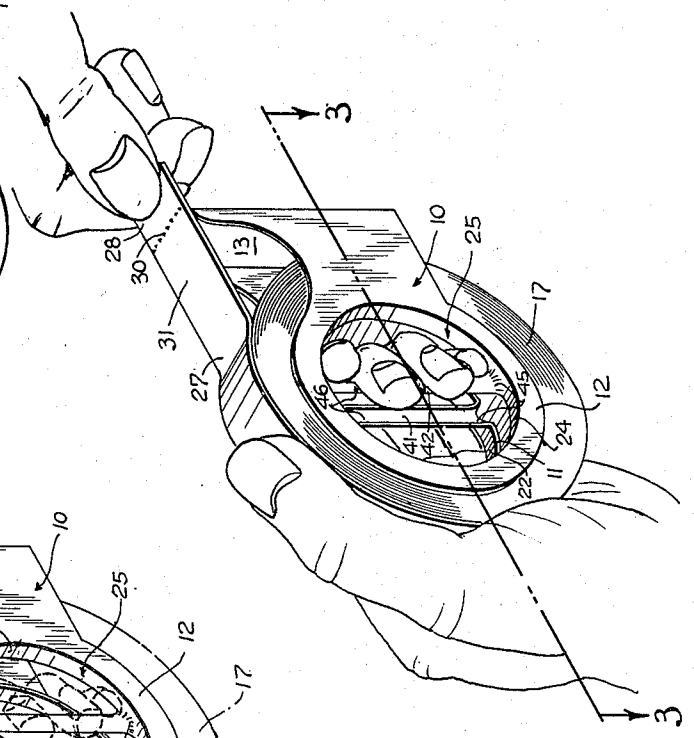


Fig. 2

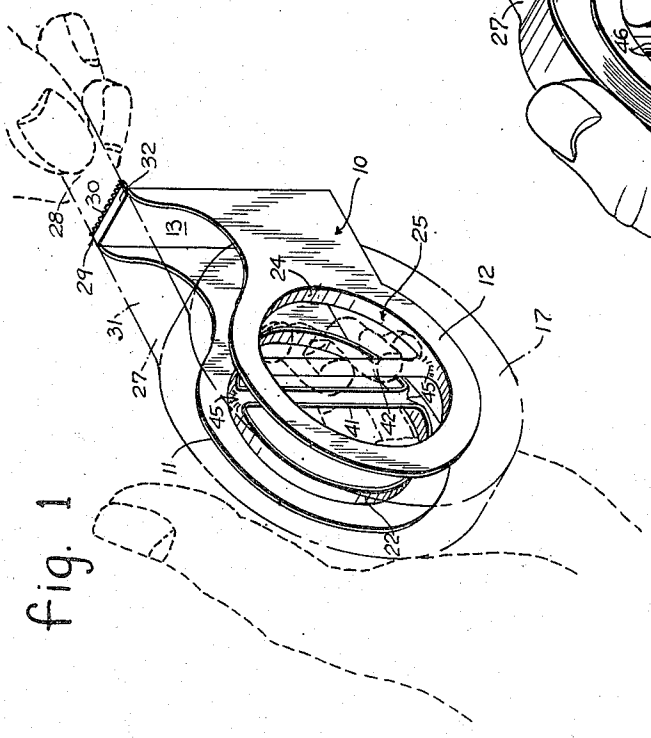


Fig. 1

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TAPE DISPENSER

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3 Claims. (Cl. 242—55.5)

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This invention relates to tape dispensers and more particularly to an improved form of dispenser for facilitating two hand control over the dispensing and tearing of tape from a conventional roll thereof.

It is one object of this invention to provide a simple form of tape dispenser by which a person can loosely support a roll of tape during unrolling thereof and subsequently effect a braking action on the roll of tape during tearing of a strip therefrom.

Another object is to provide a tape dispenser which is simple in construction, economical to manufacture and highly efficient in use.

These and other objects and advantages will appear more fully in the following description when read in the light of the accompanying drawing in which:

Fig. 1 is a perspective view of a tape dispenser embodying my improved form of construction.

Fig. 2 is a perspective view similar to that of Fig. 1 illustrating the effects brought about by my improved construction.

Fig. 3 is a section of Fig. 2 taken along line 3—3 thereof; and

Fig. 4 is a layout of the blank from which my improved dispenser is formed.

The invention is best adapted for use with larger rolls of tape of the type commonly known as masking tape. Masking tape of this type, as the name implies, is used extensively in spray painting for securing paper or other such material to portions of an article for the purpose of blocking out all portions of the article which are not to receive any paint. More particularly such type of tape is used in automobile paint shops for covering chromium plated trimming of a vehicle body so as to mask out such trimming during repainting or touching up of an original paint job on a vehicle.

It has been a common practice of tape manufacturers to supply masking tape on large rolls or spools so that a man can hold the roll with his fingers extending through the open center of the spool as though holding a large ring. It will be understood that by reason of the adhesive character of this masking tape, the torn end thereof usually reattaches itself to the roll and therefore must be picked from the roll before the tape can be dispensed therefrom. The men who apply this tape to the cars usually have difficulty in picking the torn end of the tape from the roll because their finger nails become brittle from the oil cutting and drying effects of the paint thinning fluids to which they are constantly exposed.

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The present invention is embodied in a simple roll holder and tearing platform which may be of any of the forms that are well known and suitable for the purpose of dispensing and tearing strips from a roll of adhesive tape. For purposes of illustration one of the simplest forms of spool holder 10 is shown in the drawings herein as comprising two disc shaped sides 11 and 12 joined by a bridge piece 13. The entire holder 10 is formed of a single stamping blank 14 shown in Fig. 4 with the disc portions 11 and 12 spaced sufficiently from the bridge piece 13 so that when the blank is bent at crease lines 15 and 16 into a U shape a roll of tape 17 of the size and type hereinbefore mentioned will fit into the holder.

It will be understood that the tape rolls 17 come in various widths and therefore the width of the bridge piece 13 may be varied correspondingly without departing from the spirit of the invention. Irrespective of width, the disc portions 11 and 12 are axially disposed and are each provided with a flange 22 and 24, respectively. These flanges 22 and 24 are struck inwardly with respect to their disc portions a sufficient distance to form a hub 25 of a diameter corresponding to the internal diameter of the core or spool 26 upon which the tape 27 is wound. In this manner the entire roll of tape 17 is suitably supported for rotation on the hub 25 so as to freely turn between the disc sides 11 and 12 of the holder.

The roll 17 is mounted in the holder with its free or leading end 28 of tape 27 feedable tangentially of the roll toward the upper margin 29 of the bridge piece 13 of the holder. This upper margin 29 is provided with a serrated tip 30 and is preferably bent forwardly and upwardly as shown in the drawing so that the tip 30 thereof will pierce a strip 31 of tape when the leading end 28 thereof is pulled downwardly. The strip 31 is thereby easily severed from the roll 17, the leading end of the tape adhering to the flat ledge 32 of the bridge piece 13 just back of the tip 30 thereof.

The present invention contemplates providing the holder 10 with a manual control whereby the person using the dispenser can at all times manipulate the tape with ease and assurance of dispensing the desired length of tape. To this end the holder 10 is provided with a pair of bars 41 and 42 each of which is formed with the respective discs 11 and 12 at the time the blank 14 is cut. These bars 41 and 42 are preferably disposed in parallel relation with respect to the bridge piece and each bar extends diametrically of the open center of the respective disc with which it is formed.

Simultaneously with the pressing of the flanges 22 and 24, the respective ends of the bars 41 and 42 are bent and extruded as at 45 so that the bars remain in diametric disposition with respect to the open centers of the two side discs 11 and 12 but within the outer extremities thereof. Consequently, when the blank is bent into U-shaped form as hereinbefore explained, the two bars 41 and 42 are disposed rather close to each other within the hub 25 as is best seen in Fig. 3. Thus the two bars 41—42 are disposed close enough to each other to be embraced by those fingers apposable to the thumb of the hand of the user as to be grasped between the last three joints of those fingers.

The bars 41 and 42 are further formed arcuately in cross section so as to form side segments of a handle 46 which is relatively round in configuration. The handle thus formed is such as to fit into the curvatures of the fingers of a man's hand so that the palm of the hand receives one segmental portion of the roll 17 and the heel of the hand is disposed to bear against the periphery to the roll. In this manner the holder 10 can be suitably supported in the left hand of the user and the leading end 28 of the tape pulled from the roll 17. When the desired length of tape is extended over the tip 30 of the bridge piece 13 the holder 10 can be gripped by the user's left hand. In this connection it will be noted that the handle 46 is disposed in the crook of the fingers proper of the left hand holding the dispenser so that the thumb of the left hand can be pressed down upon the periphery of the roll 17 so that the extended strip of tape can be pulled taut by the user's right hand incident to tearing of such strip from the roll.

It should be here be noted that while the holder is held loosely on the fingers of the left hand as shown in Fig. 1, the side discs 11 and 12 merely form guides for the rotatable roll on the hub structure 25. However, the spaced bars 41 and 42 are so disposed that upon closing of the fingers only of the user's left hand, i. e., those digits of the left hand apposable to the thumb of such hand, these bars are pressed toward one another. Since the bars are formed as a part of the respective discs 11 and 12, they too are drawn toward each other and press tightly against the side walls of the roll 17 to effect a brake-like action thereon. This enables the user to control the dispensing of tape lengths from the roll with assurance that no slippage will occur during tensioning of the extended strip incident to the tearing operation.

With the foregoing improvements the maskers, i. e., the workmen who apply masking tape to the articles to be painted, save considerable time because they need not fumble around with the roll 17 to peel or pick off the leading end of the roll. Moreover, with the roll in the holder the two can be carried by the fingers of the user's left hand, leaving the thumb and index finger of that hand free to cooperate with the user's right hand in stretching and placing the torn strip of tape in a proper position at the article being masked.

From the foregoing it is now apparent that I have provided such improvements in tape dispensers as to render them more efficient for quick masking and which in addition have made it possible to economize on tape as well as time so far as the workman is concerned.

While I have shown and described one specific form of device for carrying out the principle of my invention it will be apparent that the same may be susceptible to variations, alterations and modifications without departing from the spirit of this invention. I therefore desire to avail myself of all variations, alterations and modifications as fairly fall within the scope of the appended claims.

What I claim as new and desire to protect by Letters Patent is:

1. In a tape dispenser of the type having a bridge portion provided with a tearing tip and having parallel discs extending therefrom each provided with an inwardly extending annular flange adapted to support a roll of tape for rotation; the combination therewith of a diametric bar formed with each of said side discs in parallel relation to said bridge piece, said bars being arcuate in cross section to form side segments of a hand hold which is of relatively round configuration and adapted to be compressed upon gripping thereof to thereby urge the side discs into engagement with the side walls of a roll of tape between said discs.

2. In a roll tape dispenser of the type having a bridge piece from which extends parallel sides each formed with a central opening bordered by an inwardly extending flange upon which to rotatably support a roll of tape; the combination therewith of a diametric bar formed with each of said sides in parallel relation to each other and to said bridge piece, said bars being adapted to be compressed toward each other upon gripping thereof to thereby urge the sides into engagement with the side walls of a roll of tape between said sides, said parallel bars forming a hand hold adapted to fit within the fingers only of one hand of the person operating the dispenser when the fingers extend through the central opening bordered by said inwardly extending flanges and envelop the parallel bars.

3. In a tape dispenser of the type having a bridge portion provided with a tearing tip and having parallel discs extending therefrom each provided with an annular inwardly extending flange adapted to support a roll of tape for rotation; the combination therewith of a diametric bar formed with each of said side discs in parallel relation to said bridge piece, said bars being disposed in spaced parallel relation with respect to each other so as to be embraced by those fingers of a user apposable to the thumb for compression toward each other upon gripping of said bars within those fingers to thereby urge the side discs into engagement with the side walls of a roll of tape between said discs.

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