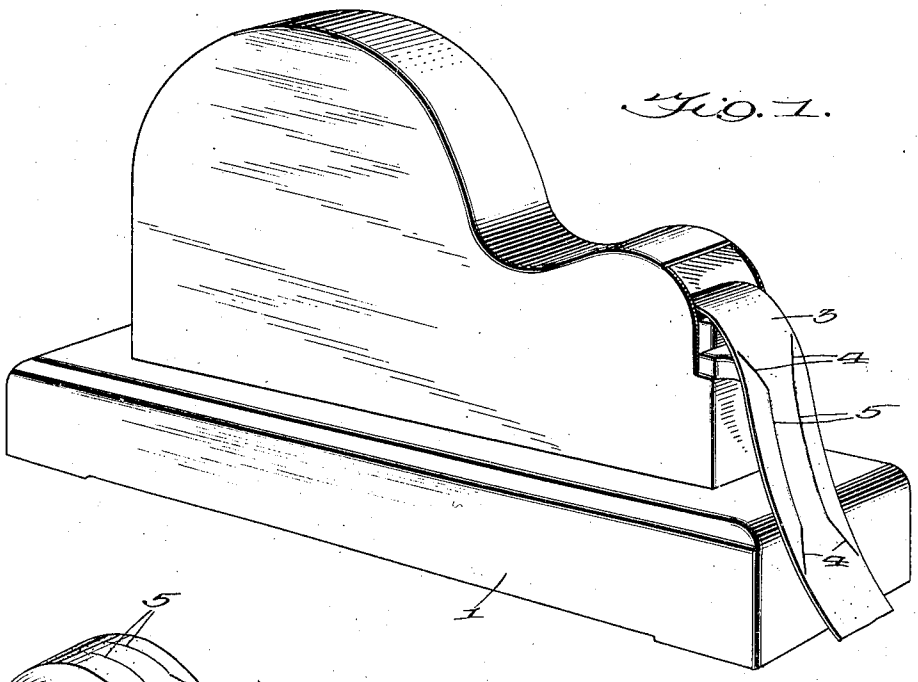
Nov. 19, 1935. J. JANOWITZ 2,021,788

PACKAGE CARRYING TAPE

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Fig. 1.



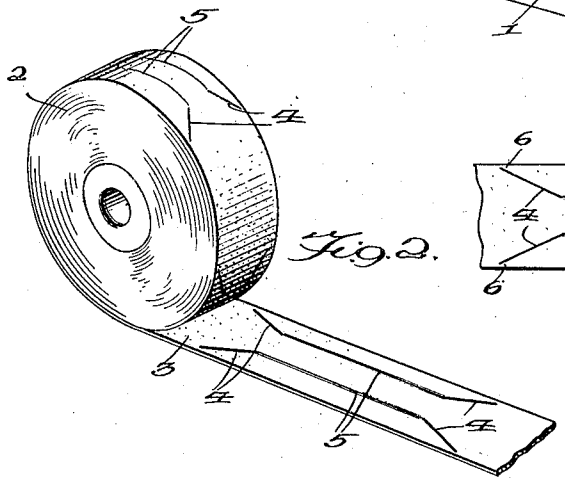


Fig. 2.

Fig. 3.

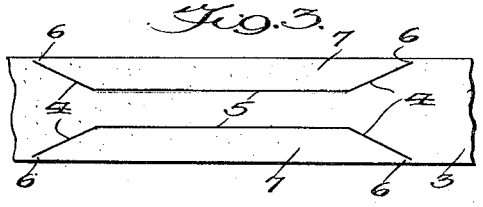


Fig. 4.

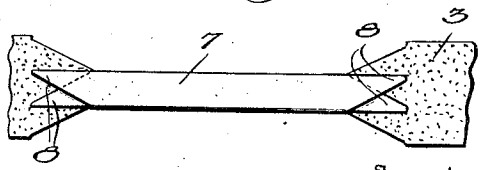
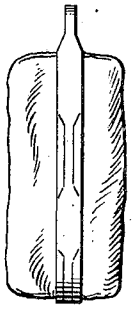


Fig. 5.



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PACKAGE CARRYING TAPE

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Fig. 6.

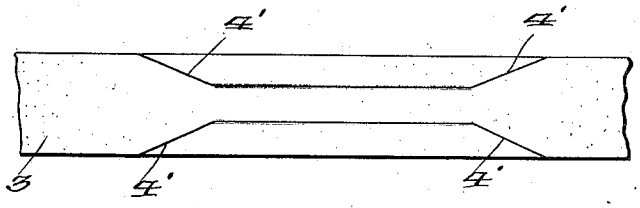


Fig. 7.

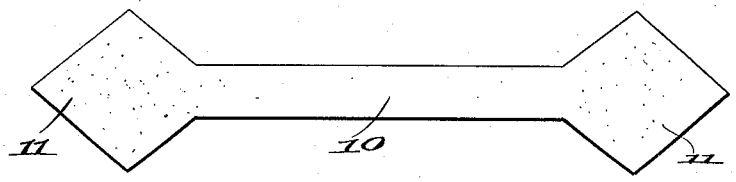


Fig. 8.

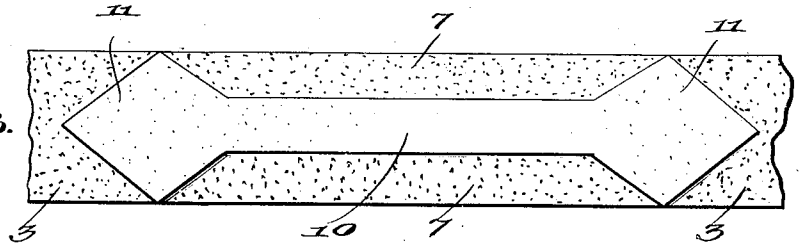


Fig. 9.

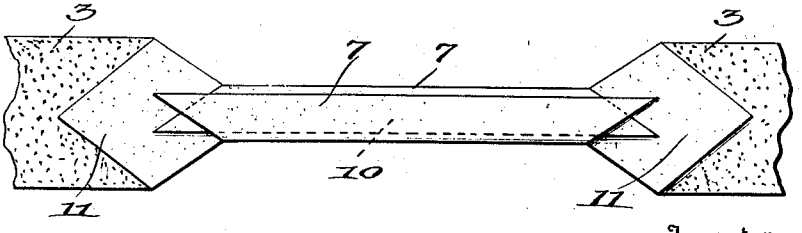
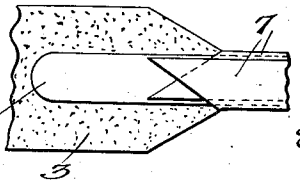


Fig. 10.



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UNITED STATES PATENT OFFICE

2,021,788

PACKAGE CARRYING TAPE

Julius Janowitz, New York, N. Y.

Application January 4, 1934, Serial No. 705,391

8 Claims. (Cl. 229—52)

This invention relates to an improvement in package carrying tape of the type normally wound in a roll for dispensing as required, as by means of a holder or machine having provision for moistening the gummed surface of the tape as it is unwound or drawn out from the machine.

The object of my invention is to provide for the formation of handles in the tape at the desired points so that when a portion of the tape is used for securing a package, a loop may be left free and a handle formed therein to facilitate carrying of the package. To accomplish this result, I provide sets of slits at intervals along the tape so that the edges may be infolded at the desired points for distances sufficiently long to form a handle which will be reinforced by the infolded edges and thereby rendered sufficiently secure to facilitate carrying of the package. Creases are preferably formed in the tape and extend longitudinally thereof between adjacent pairs of slits so as to enable the infolding to be easily and accurately accomplished, and at the same time define the shape of the handhold portion thus formed.

In the accompanying drawings:

Fig. 1 is a perspective view showing a typical form of tape-dispensing machine that may be used in connection with my invention;

Fig. 2 is a perspective view of a roll of tape constructed in accordance with my invention;

Fig. 3 is a plan view of a section of the continuous strip of tape showing the slits and creases for forming the handhold portion;

Fig. 4 is a similar view with the edges infolded to form the handhold portion;

Fig. 5 is a side elevation of a package showing the manner of applying the tape thereto;

Fig. 6 is a plan view of a portion of the tape showing a slight modification in the slits;

Fig. 7 is a plan view of a reinforcing strip adapted to be applied to the handhold portion;

Figs. 8 and 9 are views showing the reinforcing strip applied to the strip of tape; and

Fig. 10 is a view showing a modified form of reinforcing strip.

The tape-dispensing machine 1 shown in Fig. 1 is typical of the numerous kinds of machines now used for the dispensing of tape and for moistening the gummed surface thereof as the tape is drawn out of the machine, so that when the tape is withdrawn and cut off from the rolled strip in the machine it is ready for use. In Fig. 2, I have shown a roll of gummed tape designated generally by the numeral 2, which is in the form of a continuous strip 3 having one gummed surface as usual, which, when moistened enables the tape to be adhesively applied to a package.

The continuous strip 3 is formed at intervals with slits 4 which are cut approximately diagonally, and each of the slits extends from a point adjacent the extreme edge of the tape to a point spaced outwardly from the longitudinal center line thereof, and creases 5 preferably are provided between the inner ends of the corresponding slits 4, which creases extend parallel with each other with a space therebetween sufficiently wide to form the handhold portion, but of considerably less width than the width of the entire strip of tape.

A handle may be formed at the desired point in the strip of tape by first breaking the connecting web at 6 between the outer ends of the slits 4 and the edges of the tape which thus leaves edge strips 7 free to be infolded about the creases 5, and which edge strips 7 are folded in and are pressed against the gummed surface of the center portion which has been moistened by withdrawal of the strip of tape from the machine 1, so that the edge strips 7 are secured throughout their lengths to the center strip to effectively reinforce said strip while the extreme ends of the edge strips are pointed and crossed as at 8 to provide double reinforcement at the opposite ends of the handhold portion thus formed, as illustrated in Fig. 4.

There is shown in Fig. 5, one way in which the continuous strip of gummed tape may be applied to a package for securing the wrapper of the package for instance, or merely to afford a handle therefor. In doing so, the strip of tape is withdrawn from the machine in the usual way, and having a continuous gummed surface which is moistened by the machine automatically upon such withdrawal, the strip torn off from the roll is ready to be applied to the package. In doing so, one portion of the strip is left in the form of a loop so positioned as to have a set of cooperating pairs of slits 4 arranged approximately in the middle of the loop, which may be easily effected because the co-operating pairs of slits are formed at desired intervals along the continuous strip of tape. The handhold portion should then be formed by infolding of the edges as described above, and the package is thus formed with a carrying handle of a proper width less than the width of the tape, because the continuous strip of tape ordinarily is wider than the desired handhold portion, and at the same time the infolding

of the edges effectively reinforces the handhold portion, making it unnecessary to have continuous reinforcement for the tape which would add considerably to the cost thereof.

The slits and creases may be formed in the machine that makes the tape, as also any desired printing, as is customary, so that there is practically no addition in the cost of producing the tape by providing for the formation of handles therein; and, at the same time, the tape is not materially weakened since the slits are formed without any substantial removal of material.

While it is preferable that the outer ends of the slits should terminate at points spaced inwardly from the edges of the strip in order to give the added strength of continuous edges to the tape, nevertheless, the slits may extend to the extreme edges of the tape as indicated at 4' in Fig. 6, if desired, in which form the edge portions are ready for infolding without requiring breaking of the edges of the strip.

The ordinary gummed tape is of rather inexpensive paper which would not have sufficient strength to carry heavy bundles of from eight to twelve pounds. In order to reinforce the handhold portion, I may employ and adhesively attach to the center portion a reinforcing strip 10 of heavy paper or thin cardboard and of a length approximately equal to the length of the handhold portion and having preferably spear-shaped opposite ends 11 approximately coextensive with the diagonal edge portion of the tape at the ends of the handhold portion. The edge strips 7 are infolded around the reinforcing strip 10 to enclose the latter, and are adhesively attached thereto to hold said strip in place.

I do not confine myself to a spear-shaped reinforcement, because any suitable strip may be used, such as indicated at 10' in Fig. 10, either longer or shorter than the handhold portion, whichever is easier to manipulate in shaping the handle.

I claim:

1. A continuous gummed strip of paper tape having sets of co-operating slits arranged at intervals therealong, each set of slits including two pairs of laterally extending slits having their inner ends terminating at points spaced outwardly from the center line of the strip and extending approximately to the edges thereof forming infolding edge portions and a center portion between said edge portions, whereby upon infolding of the edge portions a reinforced handle is formed, said strip having longitudinally extending creases formed therein between the edge and center portions to facilitate infolding of said edge portions.

2. A continuous gummed strip of paper tape having sets of co-operating slits arranged at intervals therealong each set of slits including two pairs of laterally extending slits having their inner ends terminating at points spaced outwardly from the center line of the strip and extending approximately to the edges thereof forming infolding edge portions and a center portion between said edge portions, whereby upon infolding of the edge portions a reinforced handle is formed, said strip having longitudinally extending creases formed therein between the edge and center portions to facilitate infolding of said edge portions, the slits extending approximately diagonally of the strip to provide double reinforcement of the handle at the extreme ends thereof.

3. A roll of gummed tape having a continuous strip with a continuous gummed surface, said strip having handle-forming portions arranged at intervals therealong, each of said handle-forming portions having laterally extending slits arranged in pairs and extending outwardly from spaced points to points spaced slightly inwardly of the edges of the strip providing infolding edge portions between co-operating slits and a center portion between the edge portions for infolding of the edge portions on the center portion to form a hand-hold of less width than the strip.

4. A roll of gummed tape having a continuous strip with a continuous gummed surface, said strip having handle-forming portions arranged at intervals therealong, each of said handle-forming portions having laterally extending slits arranged in pairs and extending outwardly from spaced points approximately to the edges of the strip providing infolding edge portions between co-operating slits and a center portion between the edge portions for infolding of the edge portions on the center portion to form a hand-hold of less width than the strip, and approximately parallel creases extending longitudinally of the strip between the inner ends of co-operating slits to facilitate infolding of the edge portions.

5. A package-carrying handle comprising a strip of material having a center portion and infolded edge portions secured along the under side of said center portion, each of said portions being of a width greater than half the width of the center portion and having the ends thereof cut approximately diagonally providing overlapped spaced points at each end of the handle for reinforcement at the juncture of the handle therewith.

6. A package-carrying handle comprising a strip of material having a handhold portion of less width than the strip, and a reinforcing strip extending along said handhold portion and secured thereto, said reinforcing strip having opposite ends wider than the handhold portion and extending approximately throughout the width of the strip adjacent said handhold portion.

7. A package-carrying handle comprising a strip of material having a handhold portion of less width than the strip, said strip having approximately diagonal edges extending to the opposite ends of the handhold portion, and a reinforcing strip extending along said handhold portion and secured thereto, said reinforcing strip having approximately spear-shaped opposite ends approximately coextensive with and reinforcing the diagonal edges of the strip.

8. A package-carrying handle comprising a strip of material having a handhold portion of less width than the strip, said strip having approximately diagonal edges extending to the opposite ends of the handhold portion, and having infolded edge portions and a reinforcing strip extending along said handhold portion and secured thereto, said reinforcing strip having approximately spear-shaped opposite ends approximately coextensive with and reinforcing the diagonal edges of the strip, the infolded edge portions overlapping said reinforcing strip approximately throughout the length of the handhold portion.

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