PAPERBOARD DISPENSING CARTON WITH ACCESS TRAY AND COLLAPSIBLE CARRYING HANDLE

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The improved dispensing carton comprising the present invention has been designated for use primarily in connection with the marketing of plastic strapping and with the subsequent dispensing of such strapping at the scene of strapping operations. The invention is particularly well adapted for use in connection with the dispensing of narrow plastic strapping, for example strapping having a width on the order of one-half inch, particular problems arising in connection with such narrow strapping are prevalent where considerable wider strapping or less flexible steel strapping is concerned.

The dispenser of the present invention not only facilitates the dispensing of strapping for use in an adjacent strapping tool, but it also affords a convenient shipping container by means of which a helically wound coil of strapping, together with a supply of the necessary strapping hardware such as strapping seals or buckles, and also a hand grip type of tensioning tool, may be conveniently shipped to a given scene of operation and then, upon opening of the container in a predetermined manner, immediately placed in strapping dispensing service with a minimum of setting up operations and without requiring any particular degree of skill. Heretofore, narrow plastic strapping, when supplied in appreciable quantity, has been wound in helical fashion on an elongated cylindrical tubular core, the core being designed for installation in a mechanical dispensing apparatus including a freely rotatable spindle-supported carrier. Difficulty has been encountered in connection with such dispensing apparatus in preventing overtravel of the coil and consequent feeding of a quantity of strapping beyond that required for a given operation. To dampen the momentum of the coil, some dispensing apparatus has been provided with frictional retarding means for preventing overrunning of the strapping while other apparatus has been provided with guide tubes for the strapping in an effort to control any excess feed that may occur. Not only are such dispensing apparatus costly but they require careful manual transfer of the strapping from the shipping containers to the dispensing apparatus in order to avoid free strapping unwinding and consequent snaring at the time the coils are removed from the containers.

Where narrow plastic strapping is supplied in appreciable quantity and wound in helical fashion on an elongated core as heretofore set forth, it sometimes is put to use without installation in a dispensing apparatus by placing the coil on a stationary support and allowing the strapping to be fed endwise from the coil by a pulling operation. This frequently has resulted in slipping of the end convolutions of the helically wound coil en masse axially from the end of the coil, thus resulting in an uncontrollable tangling and kinking of the strapping which cannot be remedied. Where a few adjacent outside convolutions slip axially from a coil, it is possible to rewind the coil but where the slippage is in appreciable depth involving underlying convolutions it is impossible to rewind the coil or otherwise untangle the strapping. If the tangled portion of the strapping is severed from the coil for purposes of discard, multiple severing and the creation of a multiplicity of strapping ends leaves but little usable strapping in the coil. It has been found in actual practice that the only remedy in such an instance is for the customer to return the coil to the manufacturer for a new coil, this resulting in a complete loss to the manufacturer.

The present invention is designed to overcome the above-noted limitations that are standard upon the feeding of narrow plastic strapping from a helically wound coil to a strapping tool, as well as upon the initial setting up operations incident thereto. Toward this end, the invention contemplates the provision of a novel dispensing apparatus for helically wound narrow plastic strapping and which, insofar as its dispensing functions are concerned, requires no separate dispensing apparatus and permits feeding of the strapping without the attendant danger of strapping tangling due to endwise slipping of coil convolutions from the core upon which the coil is wound. The provision of such a dispensing apparatus being among the general objects of the invention, a further and important object is to provide such an apparatus which may be of carton-like design and configuration so that it may serve as a shipping container for a helically wound coil of strapping and which is so constructed that it may be put into dispensing service at a given scene of operations by the simple expedient of removing the cover member associated with the same, resorting to a simple setting up operation and then placing the thus opened and set up container on a stationary support in the vicinity of the tool to be employed for tensioning the strapping about an object, and progressively pulling the strapping from the container to the required extent for each strapping operation.

It is another object of the invention to provide such a dispensing carton having associated therewith compartmented means establishing a novel form of access tray for enclosing numerous articles of strapping hardware such as strapping seals, buckles and, if desired a small hand operated tensioning tool, such access tray being openly exposed and thus conveniently accessible to the operator when the carton is set up for use.

The dispensing carton of the present invention is portable in the sense that it may conveniently be transported from one strapping location to another and, accordingly, it is a further object of the invention to provide a carton having a novel association of an access tray and carrying handle, the latter in a sense providing a partition wall for the access tray and being so disposed with respect to the carton body and its contents that when the carton is lifted by such handle, the carton and its contents will be maintained in upright stable equilibrium against tilting.

Considering now the present dispensing carton from the standpoint of a paperboard container, it is an important object of the present invention to provide a carton structure of the character briefly outlined above in which substantially all of the component parts thereof, including the carton body, the access tray, the dividing wall for the latter and the carrying handle structure are all formed from a single paperboard blank. Among the features of novelty involved in connection with the blank are extreme rigidity of the erected blank; self-locking of the access tray section of the blank at the time it is initially erected; adequate bracing or reinforcing of the dividing wall and handle section of the access tray so that it will not tilt with respect to the remainder of the carton structure; collapsibility of the handle structure for conversion thereof into a closure member for the access tray; and close interfitting of such parts as move into edge-to-face, edge-to-edge and face-to-face relationship so that they is the aforementioned rigidity established but also sealing of the interior of the carton against entrance of dust and dirt is attained. Another feature of novelty associated with the present paperboard dispensing carton resides in
a novel interrelation of parts whereby the lifting force exerted upon the access tray section of the carton is widely distributed throughout the carton structure, principally in the carton side walls, so that no undue stress will be applied to localized regions of the carton when the same is lifted by the handle.

Other objects, advantages and features of novelty associated with the present dispensing carton, not at this time enumerated, will readily suggest themselves as the nature of the invention is better understood.

In the accompanying three sheets of drawings forming a part of this specification, one illustrative embodiment of the invention has been shown.

In these drawings:

FIG. 1 is a perspective view of a paperboard dispensing carton embodying the principles of the present invention and showing the same in its erected set up dispensing condition;

FIG. 2 is a fragmentary perspective view of the carton, looking into the open access tray associated therewith, the view taken in the direction indicated by the arrows 2—2 of FIG. 1;

FIG. 3 is an enlarged fragmentary perspective view showing the upper regions of the carton with the panels which comprise one section of the access tray and a portion of the carrying handle in an unfolded condition;

FIG. 4 is a sectional view taken on the vertical plane indicated by the line 4—4 of FIG. 1 and in the direction of the arrows;

FIG. 5 is a fragmentary exploded perspective view of the carton showing the same in the closed condition which it assumes as a salable package and prior to erection of the carrying handle and exposure of the access tray; and

FIG. 6 is a plan view of the paperboard blank from which the carton is erected.

Referring now to the drawings in detail, the completely erected carton assembly has been shown in FIG. 1 and designated in its entirety at 10, the assembly including a carton proper or body 12 and a cover 14. The blank from which the carton proper 12 is formed is shown in FIG. 6 and designated at B. The carton assembly in its packaged condition as it leaves the factory or packaging plant assumes the condition in which it is shown in FIG. 5 wherein the cover 14 is telescopically received over the upper end of the carton 12 and the package, thus formed, is bound by one or more plastic straps 16, appropriately positioned in encompassing relationship about the package. To set up the carton for use, the straps 16 are severed, the cover removed from the upper end of the carton and telescopically positioned over the lower end thereof, and certain panels, and flaps are swung bodily about respective hinge or fold lines so that they assume the positions in which they are shown in FIG. 1, all in a manner and for a purpose that will be described presently.

Briefly, the erected and set up carton 12 is in the form of a generally rectangular paperboard box-like structure having side walls 20 and 22, end walls 24 and 26, a composite bottom wall 28 and a rectangular open upper rim 30 beneath which there is provided a composite horizontal sunken divided access tray 31 (see also FIG. 4) the latter being divided by a vertically extending composite dividing wall and handle structure 32 having a rectangular opening 34 therein through which the fingers of the hand may be projected for carton lifting purposes. This handle structure extends well above the open rim 30 of the carton, is of an articulating nature and is so designed that the set up carton may be restored to the initial packaged condition wherein it is shown in FIG. 5 as likewise will be described presently.

While the carton 12 of the present invention may be employed as a display carton if desired, it is essentially a dispensing carton for a continuous length of plastic strapping S which is carried on a suitable core 35 and assumes the form of an involutely wound coil C, the coil being loosely and horizontally disposed within the carton in the enclosure which is defined by the various carton walls and the access tray 31. The axial extent of the core 35 and coil C is slightly less than the width of the carton so that the end convolutions of the coil assume positions in close proximity to the side walls 20 and 22 and are confined by these walls so that the strapping may not become wedged against the walls during dispensing operations. The cylindrical outer surface of the coil C rests in tangential relationship upon the bottom wall 28 as shown in FIG. 1 and strapping is fed from the carton through a small feed opening 36 (FIG. 2) which preferably is circular and of a diameter slightly less than the width of the strapping so that the free portion of the strapping will at all times be captured and frictionally held against falling back into the confines of the carton. During feeding of the strapping, as the free end portion is pulled from the carton through the feed opening 36, the coil will be constrained to rotate within the latter and slide frictionally on the bottom wall 28.

The sunken access tray 31 is provided for the purpose of supporting in an accessible position small items of strapping hardware such as a multiplicity of strap buckles, a hand grip tensioning tool, shears and any other articles of a similar nature which may be found useful in connection with the particular operation to which the strapping is to be put.

Considering now the carton 12 in greater detail, and referring specifically to FIG. 6, the parts of the blank B and their counterparts in the erected and set up carton 12 have, insofar as practicable, been similarly designated in the drawings. Thus, the blank B is divided by transverse infold seam lines into a plurality of serially arranged walls panels 22, 24, 26, 20 and 24 which, in the erected structure, comprise the four vertical walls of the carton. A narrow elongated securing flap 40 is provided on the side panel 22 and, when glued, extends outwardly to be remote to the end region of the end wall panel 24, constitutes the usual manufacturer's joint whereby a tubular blank structure is formed.

The blank B is provided with a series of bottom closure flaps 42, 44, 46 and 48, these flaps being associated with the panels 22, 24, 26 and 20 respectively, and being established by respective longitudinal infold seam lines. As indicated by the bracket 28 in FIG. 6, these four latter flaps constitute the aforementioned composite bottom wall 28 of the carton and they are so designed as to have an interlocking relationship when the carton is erected. The particular contour of this portion of the carton wall is an essential part of the present invention, and various other flap arrangements may be employed for the composite bottom wall 28 is desired. It should be noted however that the flap 42 is of full width and of full length rectangular design and, during the assembly of the bottom wall 28 it is the first infold flap of the series so that it presents a smooth unbroken surface area to the coil C which rests thereon.

Still referring to FIG. 6, the blank B is extended upwardly as seen in this view above the two side wall panels 22 and 20 and appreciable distance to 24. Side respective extended portions which have been designated by the brackets 50 and 52. These two extended portions 50 and 52 are substantially identical in their design and therefore, a description of one of them will largely suffice for the other. Considering the extended portion 50 as it appears in the erected carton, it is divided by various seam lines into partially separated panels 54, 60, 58, 62.

Two closely spaced parallel longitudinal infold seam lines establish the panel 54, this panel being of narrow elongated design and constituting a horizontal rim panel (see also FIG. 4) which forms a part of the aforementioned open carton rim 30. An outfold seam line defines the lower edge of the panel 56 and, as shown in FIG. 4, this latter panel constitutes one side wall of the composite
access tray 31. Another outfold seam line defines an edge of the panel 58, such panel constituting one horizontal bottom wall section of the access tray 31. Still another outfold seam line 50, in the form of the panel 60, this latter panel being a vertical panel and, in combination with its corresponding counterpart section in the extension 52, establishing a partitioning and reinforcing wall for the access tray 31. A hinge line defines the inner or proximate edge of the panel 62, this panel being a hinged closure panel which, in the full line position in the section of Fig. 4, and in combination with its counterpart panel in the extension 52, constitutes the handle portion of the aforementioned dividing wall and handle structure of Fig. 1. In the dotted line position thereof, the panel 62 constitutes a closure lid for the adjacent section of the divided access tray 31.

As previously stated, the blank extensions 50 and 52 associated with the side wall panels 22 and 20 are similar in their configuration and each section is formed with a rectangular opening 66 therein, the openings extending partially into each pair of adjacent panels 60 and 62. The openings 66 thus establish bridge portions 68 in the respective panel stabilizing the respective end walls which, in the set up carton, establish a handle proper by means of which the carton may be lifted bodily when the fingers of the hand are projected through the registering openings 66. The extension 52 differs from the extension 50 in only one respect, namely that the upper edge of the opening 66 therein is formed with a hinged flap 70 which constitutes an undertaker for the bridge portion 68 of the other extension 50. Two closely spaced parallel infold seam lines establish the hinged flap 68.

In order to assimilate the upward thrust of the bottom wall section 58 of the access tray 31, the upper edge of the end wall panel 26 is provided with a pair of spaced apart self-locking thrust flaps 72 which are spaced from the panel 22 by narrow rim panels 74 similar to the rim panel 54 and similarly formed by spaced apart infold seam lines. As seen in Figs. 2 and 4, the two thrust flaps are adapted to be folded inwardly of the rim 30 of the carton and into substantially coextensive face-to-face contact with the upper rim region of the panel 26 and to overlie and conceal respective laterally turned ears 76 which are formed on the adjacent edges of the dividing and reinforcing wall panels 60 associated with the blank extensions 50 and 52. The adjacent opposed edges of the two flaps 72 straddle the adjacent ends of the adjacent panels 60 as shown in Fig. 4 and thus maintain the dividing wall in its erect vertical position by assimilating any lateral thrust which may be imparted thereto by such wall. Small tabs 78 are formed on the distal ends of the flaps 72 and fit into notches 80 provided in the adjacent edges of the bottom wall panel 58, thus locking the flaps 72 in their vertical position in the erected carton. The end edges of the flaps 72 on opposite sides of the tabs 78 constitute thrust shoulders which assimilate any upward thrust that may be exerted by the bottom wall panel 58 when the carton is lifted.

Due to the locking action of the tabs 78, as well as to various close fit tolerances which are maintained in cutting the blank, and also due to paperboard stiffness, the frictional forces involved in connection with the various mating portions of the carton, including both edge-to-face and face-to-face contact areas, an extremely rigid and self-supporting carton and access tray structure is provided which offers further structural support.

However, inasmuch as the carton, once erected at the factory, is not intended to be collapsed, additional structural reinforcement may, if desired, be provided by passing one or more staples 81 through the three thicknesses of paperboard material involved in the region of the carton, where each locking flap 72 is folded over an associated ear 76 and into contact with the adjacent end wall panel 20 or 22 as the case may be. The staples 81 assimilate the downward thrust or load upon the access tray 31. With the staples 81 in position, the dividing wall structure 32 functions, not only as a divider for the access tray 31, but also as a reinforcing wall for the carton structure as a whole, particularly so as it serves to rigidify the open rim 30 of the carton and to lend support to the upper regions of the end walls. Support for the lower regions of these end walls is offered by the cardboard or other core 35 which spans the distance between these walls.

From the above description it is believed that the construction of the carton 12, as well as of the blank B from which it is formed, will be readily understood. In erecting the blank (in which the manufacturer's joint afforded by the flaps 40 has previously been effected), the blank is first squared up by bringing the side end wall panels 20, 22, 24 and 26 into their right angular relationship. The bottom wall flaps 42, 44, 46 and 48 may then be folded together in the usual manner of conventional self-locking bottom wall flap assembly, the flap 42 being the first infold flap to be folded in the series so that the aforementioned continuous bottom wall surface will be presented to the coil which is installed within the carton. After the composite bottom wall has thus been formed, the coil C of strapping is inserted into the carton so that its circular end faces are confined between the side walls 20 and 22. The loose end portion of the strapping is then passed through the circular opening 36 and thereafter the side wall extensions represented by the brackets 56 and 52 are folded to produce the sunken access tray.

This folding operation may be accomplished by first folding the panels 56 flat against the side walls panels 20 and 22 and causing the panels 58 to extend horizontally within the confines of the carton wall structure toward each other and in edge-to-edge relationship so that they lie in a common plane, thus establishing the composite bottom wall of the access tray 31. Thereafter the two panels 60 of the extensions 50 and 52 (Fig. 6) are brought to their vertical face-to-face relationship while at the same time the ears 76 are turned laterally so that they lie flush against the adjacent end walls 24 and 26 as the case may be. The locking flaps 72 are then folded inwardly of the carton rim and the tabs 78 thereon are snapped into the notches 80 in the panels 58 to lock the flaps in position, after which the staples 81 are passed through the three thicknesses of paperboard material of the end walls, ears and flaps, thus completing the erection of the carton. At this time, the access tray 31, now fully formed, may be loaded with strap fastening buckles, a hand tensioning tool and any other desired items of strapping hardware, after which the hinged closure panels 62 are swung to their horizontal tray-closing positions as indicated by the dotted line disclosure of Fig. 4, whereupon the shallow tray-like carton cover 14 may be telescopically positioned over the upper rim of the carton, thus concealing the closure panels 62 and the exposed portions of the openings 66 therein. The binding straps 16 may then be applied as indicated in Fig. 5 and the carton assembly 10 is then ready for shipment.

In the use of the carton assembly 10, the manufacturer's customer or other operator may pass the straps 36, thus releasing the cover 14 which may be conviently applied to the lower rim of the carton as shown in Fig. 1. The two closure panels 62 are then swung to their vertical contiguous face-to-face positions and the hinged underliner flap 70 is then swung through an angle of approximately 180° so that it underlines the bridge portions 68 as shown in Fig. 4, thus establishing the carton handle assembly. The free end portion of the strapping which previously had been passed through the opening 36 is then located and installed in the particular strapping tool or mechanism with which the carton may be associated and, as successive strapping operations take place, the strapping will progressively be withdrawn from the coil C through the opening 36 until the strapping has become unsuited therefor.
exhausted. From time to time, and as required, the buckles or other fasteners which are disposed within the access tray 31 as well as the tensioning tool are available for use in connection with the strapping operations. Ordinarily, once the carton has been set up on the floor or on a bench adjacent the scene of strapping operations, the set up will be a permanent one and will remain effective until the strapping of the coil C has been exhausted. However, if at the termination of a given operation it is desired to relithe the dispensing carton for a future operation, the underliner flap 70 may be restored to its original position within the planar confines of the associated panel 62 and the two panels 62 swung to their separated coplanar positions of tray-closure as previously described. The cover 14 may then be reapplied over the upper rim of the carton.

It is to be noted at this point that because the diameter of the circular opening 36 in the bottom wall of the access tray 31 is slightly less than the width of the strapping undergoing dispensing, the strapping is frictionally engaged by the circular rim of the opening and prevented from falling back into the confines of the carton at such time as the free end region of the strapping is severed from the strapping tool. Furthermore, because of the circular contour of the opening 36, a slight rotational shifting of the strapping at its point of emergence from the carton is made possible so that the strapping will not tend to assume a fixed transverse directional orientation wherein the relatively sharp side edges thereof would cut into the paperboard material surrounding the opening. The provision of such a circular feed opening constitutes one of the features of the present invention and has been the result of considerable experimentation with various types of feed openings such as rectangular and arcuate slots, elongated slits and the like.

The invention is not to be limited to the exact arrangement of parts shown in the accompanying drawings or described in this specification as various changes in the details of construction may be resorted to without departing from the spirit of the invention. Therefore, only to the extent that the invention has particularly been pointed out in the accompanying claims is the same to be limited. Having thus described the invention, what I claim and desire to secure by Letters Patent is:

1. A dispenser for plastic strapping, said dispenser comprising a paperboard carton having a rectangular bottom wall, opposed side and end walls projecting vertically inwardly from said bottom wall and defining an upper open rectangular rim, a rectangular internal horizontal wall disposed below the level of said rim in the upper regions of the carton and bridging the distance between said side and end walls, said horizontal wall, in combination with said bottom, side and end walls, establishing a closed lower compartment and an upper upwardly opening access tray for small articles of strapping hardware, the rim of said tray being substantially coincident with said carton rim, the side and end walls of said access tray being defined by portions of the carton side and end walls respectively and the horizontal wall defining the bottom wall of the tray, and a reinforcing partition wall projecting vertically upwardly from the longitudinal centerline of said horizontal wall above the level of said rim and bridging the distance between said end walls, there being an opening in said partition wall for the fingers of the user establishing a bridge section above the level of said rim whereby the carton as a whole may be lifted, there being a feed opening for strapping in said horizontal wall, and an involutely wound cylindrical coil of strapping loosely and horizontally disposed within said lower compartment, presenting annular end faces in close proximity to said side walls, extending transversely of the carton, and being frictionally supported on said bottom wall for rotation of the coil when the strapping thereof is pulled progressively through said feed opening.

2. A dispenser as set forth in claim 1, wherein said partition wall is of an articulated composite nature and includes two thicknesses of position, the two parts of said upper movable section being capable of swinging movements about their respective hinge lines between vertical positions of contiguity wherein they establish said bridge section for carton-lifting purposes, and coplanar horizontal positions wherein they constitute closure walls for the rim section on opposite sides of the tray-dividing section.

3. A dispenser as set forth in claim 2, wherein the opening in said partition wall projects downwardly into the confines of the access tray and intersects said hinge lines, thus establishing limited communication between the divided tray sections.

4. A dispenser as set forth in claim 3 and including, additionally, a hinged underliner flap for the lower edge of said opening in the partition wall, carried in edge of said movable parts and foldable around the other movable part so as to underlie said bridge section.

5. A dispenser as set forth in claim 3 and including, additionally, a shallow tray-like closure capable of selective telescopic reception over the upper end of the carton when the two parts of said upper movable handle and tray-closure section are in their horizontal tray-closing positions, and over the lower end of the carton when said two parts are in their vertical handle-forming positions.

6. A flat paperboard blank capable of erection to provide a dispenser for plastic strapping and including four serially arranged rectangular wall panels separated by intervening transverse seam lines and including alternately arranged side wall and end wall panels adapted to be folded to provide a vertical rectangular open-ended tubular structure, a closure flap hingedly connected by an infold seam line to the lower edge of each wall panel and adapted to be folded at a right angle thereof to provide a composite horizontal bottom wall closing the lower end of the tubular structure, an extension hingedly connected to the upper edge of each side wall panel by a transverse infold seam line and including three serially arranged generally rectangular wall panels including a proximate panel, a distal panel and an intermediate panel connected to the proximate and distal panels by outfold seam lines, said proximate panel being adapted for folding inwardly flat against the upper region of its associated side wall panel in the tubular structure to establish a longitudinal ridge section at the upper end of the tubular structure and to provide a vertical side wall for a swan neck access tray within the tubular structure, said intermediate panel being adapted for lateral folding with respect to the adjacent proximate panel to provide one section of a composite horizontal bottom wall for said access tray, the transverse dimensions of the panels of the two extensions and being such that when they are flat folded, the intermediate thereof are coplanar and maintain an edge-to-edge relationship with the two distal panels being disposed in face-to-face contiguity and establishing said composite vertical dividing and reinforcing wall, the distal panel of each extension being formed with a handle opening therethrough, the openings of the two distal panels being disposed in transverse register when the panels of the two extensions are thus folded and establishing a composite bridge section in the upper region of said vertical dividing wall.

7. A flat paperboard blank as set forth in claim 6 and including, additionally, a pair of thrust flaps hingedly connected to the upper edge of each of said distal panels by infold seam lines, the flaps of each pair being spaced apart by a distance substantially equal to the thickness of said dividing wall, said flaps being adapted
for folding inwardly flat against the upper region of their associated end wall panels in the tubular structure with the flaps of each pair straddling said dividing wall to lend lateral reinforcement thereto against tilting with respect to the tray bottom.

8. A flat paperboard blank as set forth in claim 7 and including, additionally, a locking tab on the distal edge of each thrust flap, and a cooperating tab-receiving notch in the transversely extending edge of each intermediate panel.

9. A flat paper board blank as set forth in claim 8, wherein the over-all longitudinal extent of each pair of thrust flaps is approximately equal to the longitudinal extent of its associated end wall panel whereby when the thrust flaps are folded flat against such end walls they establish respective longitudinal rim sections at the upper end of the tubular structure and provide vertical end walls for the sunken access tray.

10. A dispenser as set forth in claim 1, wherein said feed opening in the horizontal bottom wall of the access tray is of circular configuration and of a diameter slightly less than the width of the strapping, whereby, upon pulling of the strapping through the feed opening, rotational movement of the strapping within the opening may take place and whereby, when the pulling force exerted upon the strapping is relieved, the strapping will be frictionally held against reentry into the lower compartment.

References Cited by the Examiner
UNITED STATES PATENTS
3,059,765 10/1962 Eifrid 206—59
3,150,769 9/1964 Cohn 206—52

LOUIS G. MANCENE, Primary Examiner.