

Feb. 10, 1970

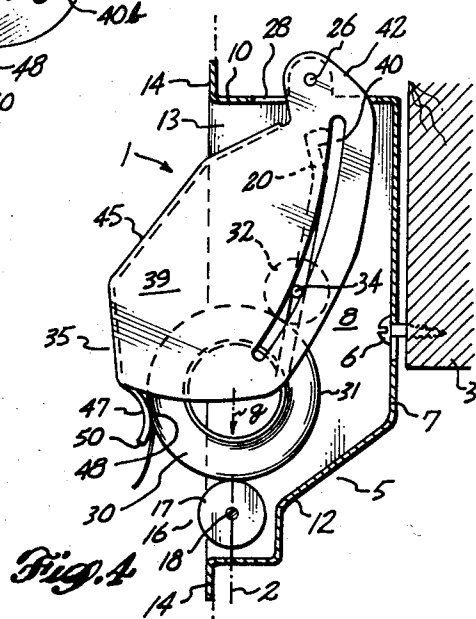
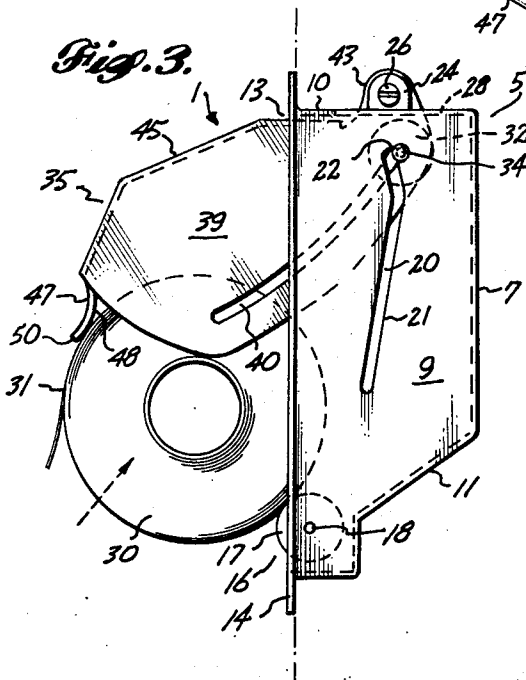
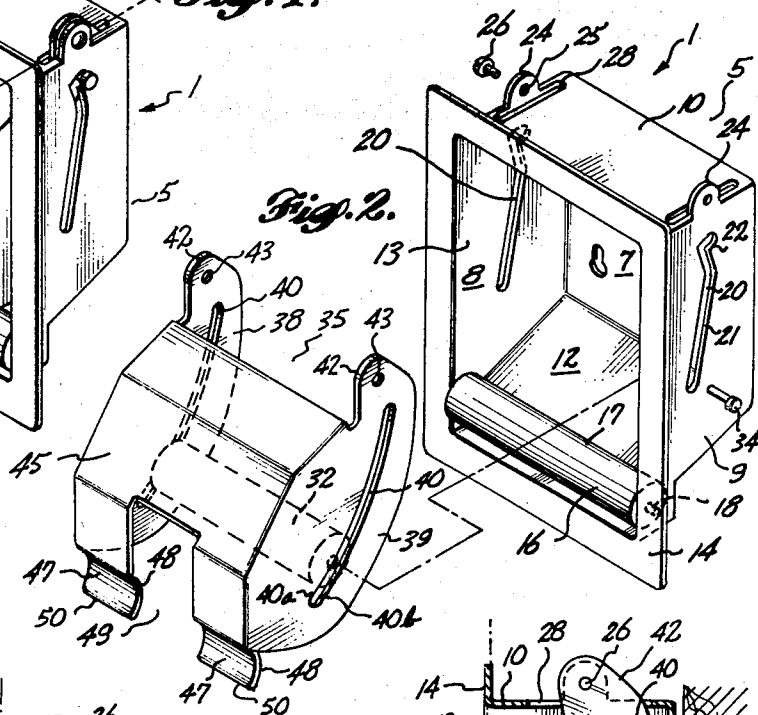
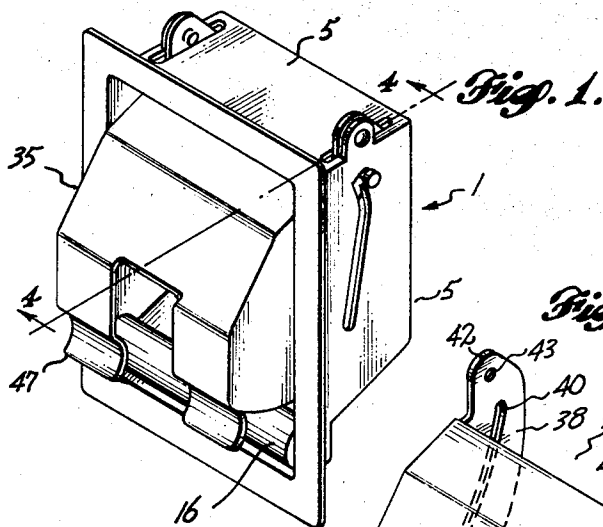
R. C. GOSS

3,494,518

RIBBON DISPENSER

Filed April 30, 1968

3 Sheets-Sheet 1



INVENTOR
ROBERT C. GOSS

BY

Christensen, Sanborn & Matthews
ATTORNEYS

Feb. 10, 1970

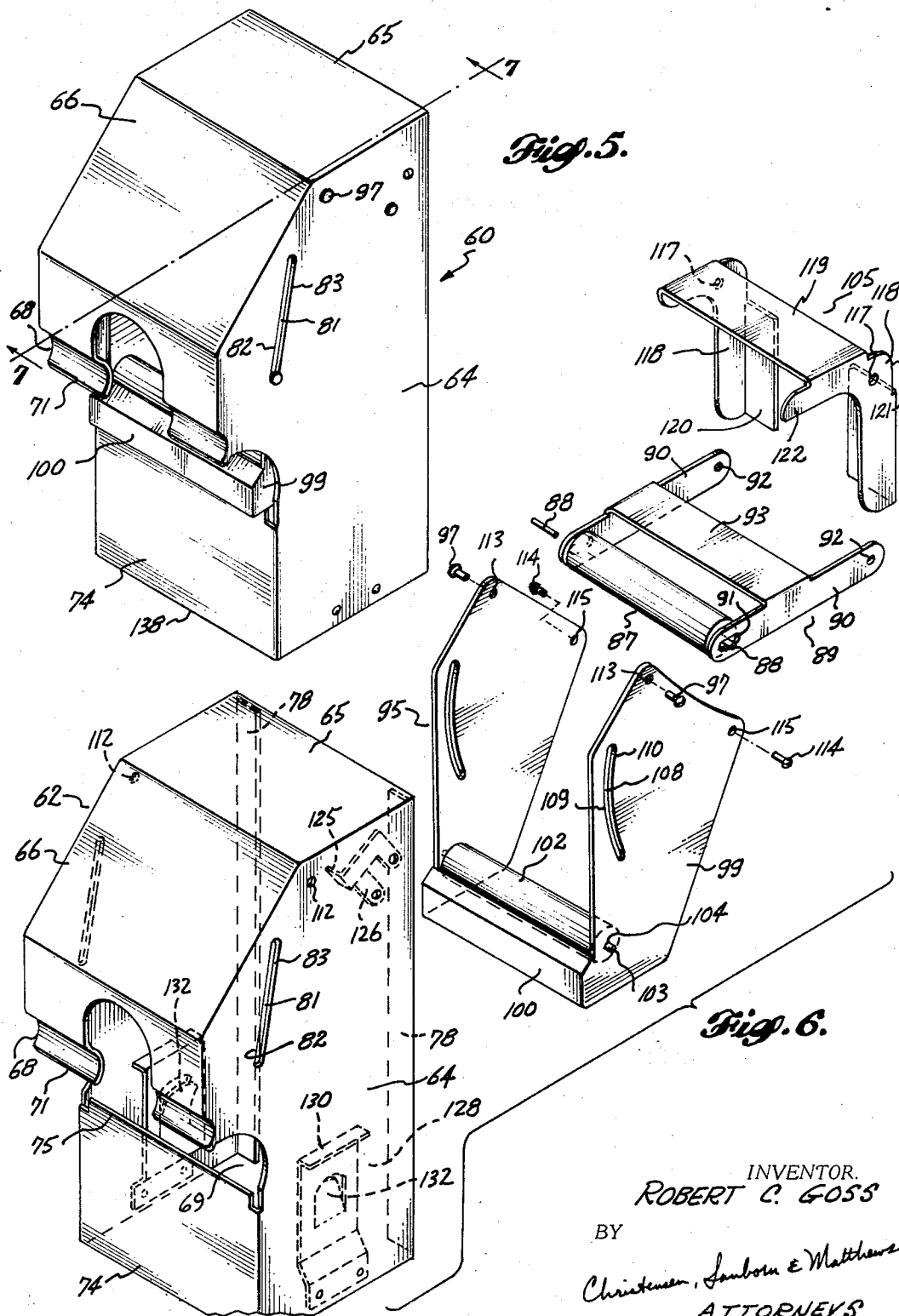
R. C. GOSS

3,494,518

RIBBON DISPENSER

Filed April 30, 1968

3 Sheets-Sheet 2



Feb. 10, 1970

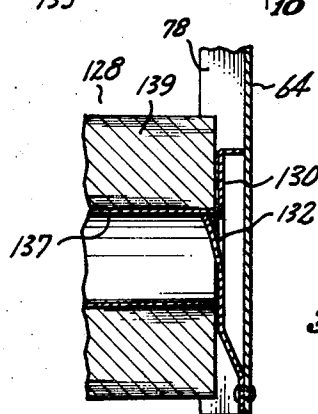
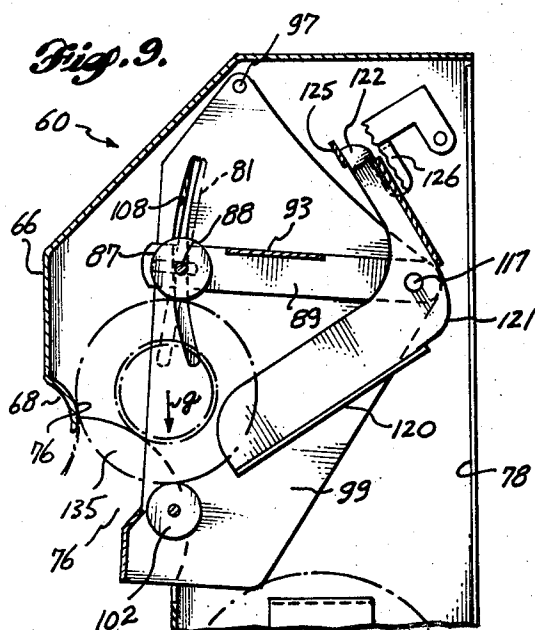
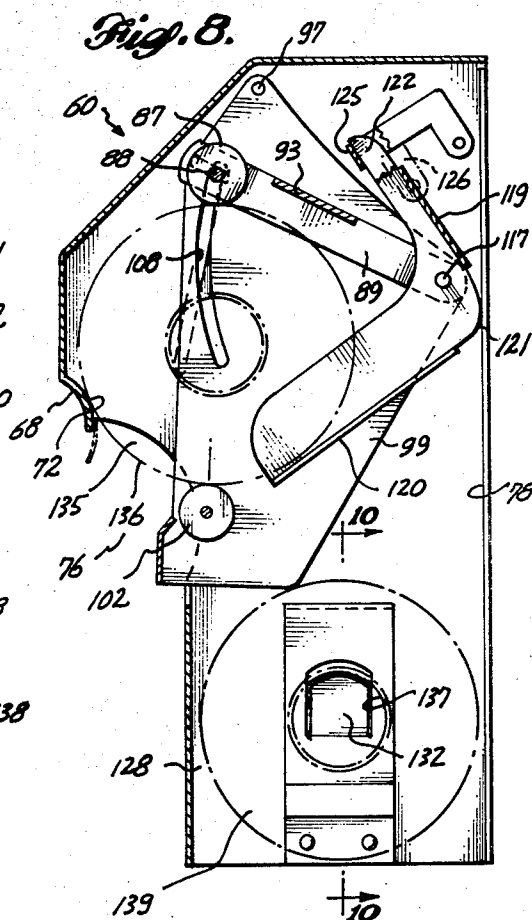
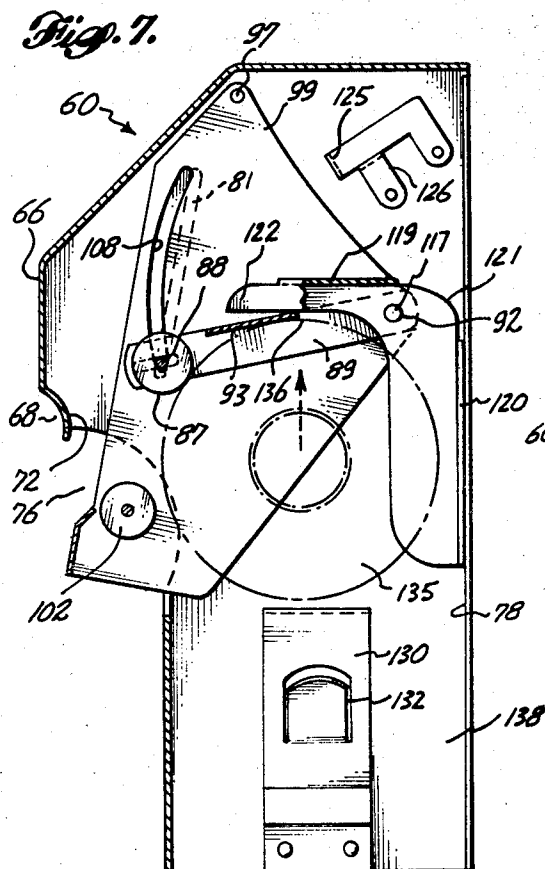
R. C. GOSS

3,494,518

RIBBON DISPENSER

Filed April 30, 1968

3 Sheets-Sheet 3



INVENTOR.
ROBERT C. GOSS

BY

BY
Christensen, Sanborn & Matthews
ATTORNEYS

1

2

3,494,518

RIBBON DISPENSER

Robert C. Goss, 14230 31st Ave. S.,
Seattle, Wash. 98168

Filed Apr. 30, 1968, Ser. No. 725,394

Int. Cl. B26f 3/02; B65h 19/14

U.S. Cl. 225—34

10 Claims

ABSTRACT OF THE DISCLOSURE

An apparatus for dispensing ribbons such as toilet tissue utilizing three contacting members for supporting the ribbon on its exterior surface. The contacting member may have roller surfaces to reduce frictional drag between the contacts and the ribbon. While one of the contacting members is in a fixed position, the other two contacting members through pivoting mountings and complementary axle engaging cam surfaces move relative to the fixed member as the diameter of the ribbon is changed. In one design the ribbon roll is easily inserted or removed at any time from the dispenser, while in a commercial design the ribbon roll cannot be removed until it is nearly spent. Additional storage space may be provided for additional rolls which can be easily inserted to replace a spent roll.

BACKGROUND OF THE INVENTION

Field of the Invention

This invention relates to an apparatus for dispensing substantially continuous ribbons such as toilet paper, paper towels, tape or the like, and it relates more particularly to generally improved dispensing apparatus wherein the ribbon roll is supported by its exterior circumferential surface by a three-point suspension system.

Description of the prior art

The most generally used and best known structure for holding and dispensing continuous ribbons such as toilet paper includes a telescopic center roller which is inserted into the core of the ribbon and suspended between two projecting side arms which hold the ends of the roller. Another widely used ribbon dispenser eliminates the requirement for the telescoping roller by providing opposed inwardly extending stub shafts mounted on side support arms in such a manner that the stub shafts are inserted into the core of the ribbon, with some provision being made for moving one of the stub shafts axially of the core when removing the core and refilling the holder. Both of these conventional holders have disadvantages which in one degree or another have vexed users for years.

The principle disadvantage of the telescoping roller type is the requirement for the user to flex a biasing means while the core of the expended ribbon is still positioned around the roller to thereby shorten the roller to permit its removal from between the supporting arms. This is often a difficult task which cannot be performed easily by small children or the handicapped and often requires two hands to perform. In addition several of the more popular biasing systems for the telescopic roller are of sufficient force that once the roller has been removed from the confining grasp of the supporting arms one or more elements of the telescopic roller may become free to expand and become propelled out of the control of the user. It is not uncommon for the spring or one end of the telescoping roller to become lost in a plumbing fixture or in some other inaccessible part of the room in which the holder is installed. A further disadvantage of the telescopic roller type holder is that of material waste. When a small child

or other user applies too much of a pulling force on the ribbon there is a tendency for the roll to continue its rotation issuing far more than the desired amount of ribbon material which is difficult to rewind back onto the supplying roll.

Another disadvantage of the telescopic roller holder which is shared by the stub shaft holder is the requirement placed on the ribbon goods manufacturers to provide a reinforcing inner core member with each roll of the ribbon so that the stub shafts or telescopic rollers can be inserted into the hollow chamber formed by the reinforcing core member. In addition, the stub shaft holder is inoperative unless the manufacturer of the rolled goods has produced a roll having a standard width for proper support by the stub shafts. Further, if the inside diameter of the core member is slightly undersized or partially crushed, it is difficult to load such a roll into this style of holder. Stub shaft holders often apply so much side pressure to the roll goods that it is difficult to dispense a useful length of the material. It has also been noted that this style of holder requires a fair degree of manual dexterity on the part of the user who is to load the ribbon goods into the holder. In addition, there is a requirement for a certain amount of space for swinging one or both of the side-holding arms outwardly for removal of the central core and placement of the new roll into the holder.

In ribbon dispensers located in public restrooms there is often a problem caused by an inadequate supply or pilferage of the toilet paper. To provide an adequate supply, maintenance personnel expend a great deal of time re-supplying the tissue holders. If local storage is used, the pilferage problem is often compounded thus requiring the additional expense of locked storage units. Such units often include mechanisms permitting the individual users to position a stored roll into the dispensing position in the holder, but such structures, however, are often expensive, complicated, and not secure against pilferage or difficult to maintain. It is therefore the principal object of the instant invention to provide a generally improved ribbon dispensing apparatus which overcomes the various recited disadvantages of previously known dispensers.

It is an additional object of the instant invention to provide an improved ribbon dispenser which utilizes a suspension system for holding the roll of ribbon such that it can be easily dispensed while providing enough inherent system friction to prevent excessive ribbon overrun.

Another object of the instant invention is to provide a generally improved ribbon dispenser which does not require that the rolled ribbon include a reinforcing central core member of a certain size or shape since the ribbon is supported by its exterior circumference rather than by its side edges or inside circumference.

Yet another object of the instant invention is to provide an improved ribbon holder which can be easily operated to remove expended rolls and to fill with new rolls without risking the loss of important parts and without requiring any high degree of manual dexterity on the part of the user.

A still further object of the instant invention is to provide a generally improved ribbon dispenser for use in public facilities which includes a simple mechanism for supporting the roll in such a manner that it cannot be pilfered from the holder and at the same time includes a provision for pilfer-proof storage of additional rolls.

It is another object of the instant invention to provide a ribbon dispenser and holder which because of its supporting system does not require that the particular ribbon items being dispensed have any specific standard width or inside diameter. A related object of the instant invention is to provide a generally improved ribbon dispenser utiliz-

ing trouble-free components which can be easily manufactured and operated by users having little mechanical aptitude.

SUMMARY OF THE INVENTION

The present invention relates to a generally improved apparatus for holding ribbon goods by supporting the goods by their exterior circumference such that the goods are easily dispensed from the holder and additional rolls are easily resupplied to the holder.

According to the invention the roll goods are supported and suspended by three support members. Each member is movable relative to the other two members so that adequate support is provided as the diameter of the roll goods is changed. One of the support members is fixed to a pivoting assembly which has defined in one portion thereof a cam surface for engagement by a second of the support members for relatively moving the first and second of said supports as the assembly is pivoted due to the change in size of the ribbon. In the preferred form two of the support members are rollers, each having an axis generally parallel to the axis of the ribbon. In one embodiment a cover member is pivoted at one end to the main housing of the holder and defines in one of its edges one of the support surfaces. The cover includes side walls defining cam surfaces engaged by the axles supporting a second support member. The axles also engage other cam surfaces defined in the side walls of the housing. A third support member is secured to the housing adjacent to its front opening. As the ribbon diameter is reduced the three support members continue contacting the exterior surface of the ribbon since the axles of the second support member move in a path defined by the housing wall cam surfaces and the axles urge the cam surfaces of the cover member to cause it to pivot about its connection with the housing.

In another embodiment the housing of the dispenser defines a front opening and one edge of the opening is formed to provide one of the support surfaces for the ribbon. The housing side walls define first cam surfaces and include a latch member and first pivot pins. Pivotaly mounted on said first pivot pins within the housing is an assembly which provides support for a second of the support members which is positioned within the front opening of said housing. This assembly includes a second pivot connection and defines in its side walls second cam surfaces. A third support member is supported on a yoke pivotally connected to said assembly at the second pivot connection. The axle of the third support member engages said first and second cam surfaces and thereby causes the three support members to move relative to one another as each maintains contact with the outside circumference of ribbon. The housing's walls are extended below said opening to provide storage space for additional ribbons. Each storage ribbon is suspended by its sides through the action of inwardly deflected yieldable spring members which permit the rolled material to press the spring members outwardly from the sides of the roll goods as the roll is pushed upwardly but which prevent the roll goods from being pulled back downwardly. A backstop member is also attached to the assembly at the second pivot connection and functions to prevent the ribbon in service from falling back into the storage part of the housing.

These and other features and advantages of the invention will become more clearly apparent from the following detailed description thereof which is to be read with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIGURE 1 is an isometric view illustrating the first embodiment of the improved dispenser apparatus made in accordance with the instant invention;

FIGURE 2 is an exploded isometric view showing the various components of the first embodiment of the dispenser shown in FIGURE 1;

FIGURE 3 is a side elevation view of the first embodiment dispenser illustrating it in its loading position in accordance with the instant invention;

FIGURE 4 is a side sectional view through lines 4—4 of FIGURE 1 illustrating the position of the components of the first embodiment of the improved dispenser as they are positioned when the ribbon has been partially dispensed;

FIGURE 5 is an isometric view of the second embodiment of the improved ribbon dispenser made in accordance with the instant invention;

FIGURE 6 is an exploded isometric view of the dispenser shown in FIGURE 5 illustrating the general arrangement of its components made in accordance with the instant invention;

FIGURE 7 is a side section view of the second embodiment dispenser from lines 7—7 of FIGURE 5 illustrating the position of the components as a new ribbon is loaded into the dispenser, in accordance with the instant invention;

FIGURE 8 is a similar view to that shown in FIGURE 7 illustrating the position of the dispenser components as one full ribbon is ready for dispensing and one spare ribbon is held in a storage position;

FIGURE 9 is a similar view to that shown in FIGURE 7 illustrating the dispenser with the components in the position assumed when the ribbon has been partially dispensed; and

FIGURE 10 is a partial front section view through lines 10—10 of FIGURE 8 illustrating the storage portion of the dispenser made in accordance with the instant invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

For purposes of illustrating the various concepts and features involved in the instant invention two preferred embodiments are described in some detail with the first embodiment, shown in FIGURES 1 to 4, principally designed for general domestic and noncommercial uses, while the second embodiment, shown in FIGURES 5 to 10, involves a more pilfer-proof design principally for use in commercial installations.

With reference to FIGURES 1 through 4, it is seen that the first embodiment 1 of the improved ribbon dispenser is of a simple design involving basically a housing assembly 5 including a first support member 16, a second support member 32 and a cover assembly 35 with third support member 47. As particularly shown in FIGURE 4 a ribbon 30 is supported by three support members 16, 32 and 47 contacting the exterior surface 31 of the ribbon 30.

Housing assembly 5, as best shown in FIGURE 2, may be of an open box-shape and supported on the side wall 3 of a house or other suitable support through a suitable fastening element 6 such as shown in FIGURE 4. Housing assembly 5 includes rear wall 7 from which are extended side walls 8, 9, top wall 10 and bottom wall 12. First support member 16 has a convex surface provided by roller 17 which is supported in the side walls 8 and 9 by means of axle pins 18 for easy rotation of the roller 17 about the pins 18. The axis of roller 17 is generally parallel to the axis of ribbon 30. Defined in the side walls 8 and 9 of housing assembly 5 are first cam slots 20 having a main guide portion 21 extending generally vertically and an optional locking portion 22 extending generally horizontally from the main portion 21. The purpose of the cam slot 20 will be explained in more detail later. For convenience of attachment to the cover assembly 35, housing assembly 5 includes pivot ears 24 extending from side walls 8 and 9 above top wall 10 with suitable apertures 25 defined by ears 24 for insertion of a pivot pin 26 therethrough. To accommodate this pivotal connection, insert slots 28 are defined in the side edges of top wall 10 adjacent to pivot ears 24 and side walls

5

8, 9 to permit insertion of the pivot ears 42 of cover assembly 35 therethrough.

Cover assembly 35 includes opposed spaced side plates 38 and 39 which are supported to be substantially parallel to and insertable between side walls 8 and 9 of housing assembly 5 by means of front plate 45 which spans between and supports side plates 38 and 39. A second pair of cam slots 40 is defined in the side plates 38 and 39. Cover plate 45 is formed to house the ribbon goods in an attractive manner and includes at its lower extremity the third supporting surface 47 formed by the convex surfaces 48 on the inner side of the cover plate 45. For ease of finding the dispensing end of the ribbon goods, a convenient access aperture 49 may be cut out of and defined by the lower portion of the cover plate 45. Edge 50 of cover plate 45 may be used as a cutting edge if desired. One connection between cover assembly 35 and housing assembly 5 of dispenser 1 is obtained through the provision of pivot ears 42 forming one end of side plates 38 and 39 and defining therein a pivot aperture 43 for insertion therethrough of the pivot pin 26. A second form of connection between housing assembly 5 and cover assembly 35 is through the second support member 32 shown in the form of a roller having axle pins 34 which engage first and second cam slots 20 and 40. The axis of roller 32 is generally parallel to the axis of ribbon 30.

In operation and as shown in FIGURE 3, ribbon 30 is loaded into the first embodiment holder 1 by inserting the user's hand between first and third supports 16 and 47 to push second support member, roller 32, up along the first and second cam slots 20 and 40 until the axle pins 34 are held in the locking cam 22. This engagement between axle pins 34, second cam slot 40 and cam lock slot 22 holds the cover assembly 35 in its highest position providing maximum access for inserting or removing ribbon 30 through the opening between the first and third supports 16 and 47. After ribbon 30 is inserted through this opening, cover assembly 35 is lifted slightly or jiggled to free the axle pins 34 from locking slot 22 so that pins 34 fall by gravity along the first and second cam slots 20 and 40 until roller 32 comes into contact with the exterior surface 31 of the ribbon 30. As the ribbon 30 is dispensed it may be cut by pulling it up against the bottom edge 50 of the third support 47. Through the issuing of the ribbon goods the diameter of ribbon 30 is reduced but the contact between its exterior surface 31 and the three support members 16, 32 and 47 is maintained throughout the reduction of the size of ribbon 30. The size of ribbon 30 is not critical as long as it will fit between the side plates 39 and 38 and its largest diameter can be accommodated by the maximum opening between the support roller 17 and the third support 47. The size or shape of an inside core of the ribbon 30 is not critical to the proper operation and easy loading of the first embodiment holder. With reference to FIGURE 4 it is seen that ribbon 30 becomes smaller in diameter, second support roller 32 merely falls through the action of gravity with its axles 34 engaging cam slots 20 and 40 to set the distance between the three support members throughout the dispensing cycle for ribbon 30. For best results the point of contact between ribbon surface 31 and the surface of roller 17 is in line with a vertical plane "2" passing through the center of gravity of ribbon 30 throughout its dispensing size changes. By utilizing rollers 17 and 32 as the first and second support means there is no great amount of effort required to unroll the ribbon but there is sufficient inherent drag of the convex surface 48 of the third support means 47 to prevent overrunning of ribbon 30 beyond that desired by the user.

If during the use of the first embodiment dispenser 1 ribbon 30 happens to be tipped backward such that it is no longer in contact with third support surface 48, it will not fall far since bottom wall 12 is slanted and provides an adequate support for the ribbon 30 as it continues to

6

be dispensed. For easier unrolling, however, it is preferred that ribbon 30 be supported by the three desired surfaces; that is, support surfaces provided by rollers 17, 32 and the concave surface 48 of the third support 47, with the maximum arc of separation between adjacent contacting surfaces held to 180°.

It should also be noted that if at any time ribbon 30 is to be removed prior to its becoming spent, it is an easy matter for the operator to push ribbon 30 upwardly to cause second support roller 32 to transit through its axle pins 34 the full length of the first and second cams 20 and 40 into locking cam 22. If two hands are free for the user, a mere upward push on the roll goods 30 will raise the second support roller 32 adequately so that the second hand can be used to hold the cover assembly 35 as the roll goods are pulled out between the first support roller 17 and the third support surface 48.

The formation of the cam surfaces 20, 40 can take on a wide variety of actual configurations following well known cam generation techniques. An optional feature is the provision of the locking cam 22 since the user could merely hold the cover assembly 35 with a hand during the loading or removal of ribbon 30 from dispenser 1. To obtain the benefit of the simplicity of operation as provided by the first embodiment it is merely necessary that the cooperating cam slots 20 and 40 be configured in such a way that the forces of gravity are adequate for causing the second and third support members 32 and 47 to follow the reduction in diameter of the ribbon 30 to maintain a constant three point support.

It is therefore seen that through the use of the first embodiment dispenser 1 there has been provided a generally improved dispenser which has none of the disadvantages recited with reference to the previously and generally accepted designs for ribbon dispensers. The ribbons can be easily loaded and removed from this embodiment and they can be easily dispensed during the time that they are held in the dispenser 1.

As shown in FIGURES 5 through 10, a second embodiment dispenser 60 includes a first assembly 62, a second assembly 95, a second support member 87, and a back-stop assembly 105.

As shown, first assembly 62 forms a housing which includes side walls 64, a top wall 65, a front wall top portion 66 and a front wall lower portion 74. The lower edge 71 of front wall top portion 66 forms a cutting edge adjacent to first support member 68 having concave surface 72 formed in the inner side thereof. Access aperture 69 is defined by the lower edge 71 and upper edge 75 of the lower portion of the front wall 74. The rear edge of side walls 64 may be joined by an inwardly turned rear edge lip 78 which may be used in supporting the dispenser 60 against a wall. Defined in the side walls 64 of the first assembly 62 are first cam slots 81 having front cam edges 82 and rear cam edges 83.

The second support member 87, in the form of a roller having axle pins 88 projecting outwardly from the ends thereof, is positioned within the first assembly 62 and slidable along first cam slots 81 by means of the axle pins 88 which project through and engage first cam slots 81. Also supporting second support member 87 is yoke 89 which includes side arms 90 defining in their forward end an axle slot 91 and in their rear end a pivot aperture 92. Side arms 90 are spaced generally parallel from one another to provide support to the axle pins 88 of the second support member 87 with the axle pins 88 extending through the axle slots 91. Crosspiece 93 functions to rigidly hold the desired spacing between the side arms 90 and has an additional function which will be discussed later.

Second assembly 95 includes generally parallel and spaced side plates 99 which are held in their separated position by means of a cross-brace 100. The spacing between side plates 99 is something more than the spacing between side arms 90, to permit second support 87 to be

held between side plates 99, and something less than the spacing between side walls 64 of the first assembly 62 so that the second assembly 95 is held within the first assembly 62 with the cross-brace 100 extending through the access aperture 69 formed in the front of the first assembly 62, as shown in FIGURE 5. Adjacent to cross-brace 100 and extending between side plates 99 is third support member 102 in the form of a roller supported by roller axle 103 projected into axle apertures 104 defined in side plates 99. Also defined in the side plates 99 are second cam slots 108 having forward edges 109 and rear edges 110 through which are extended axle pins 88 of second support member 87. Pivot pins 97 connect first assembly 62 pivotally with second assembly 95 by extending through pivot apertures 112 formed in first assembly side walls 64 and pivot apertures 113 formed in the side walls 99 of the second assembly 95. Another set of pivot pins 114 is projected through pivot apertures 115 defined in side walls 99 of second assembly 95 into and through pivot apertures 92 in yoke member 89, and finally into pin apertures 117 of backstop assembly 105.

Backstop assembly 105 includes generally parallel side support arms 118 spaced apart by crossbar 119 a distance somewhat less than the spacing between side arms 90. A pair of stop pads 120 are supported by arms 118 and extend inwardly of arms 118 in opposite directions.

Backstop assembly 105 also includes latch finger 122, extending from one of its side support arms 118 and positioned for engagement against a latch dog 125 which extends inwardly from an upper inside wall 64 of the first assembly 62. The position of latch dog 125 is adjusted by stop element 126. Latch dog 125 and stop element 126 are shown in dashed lines in FIGURE 6 to be pivotally mounted on wall 64 of assembly 62. Cam surface 121 is defined by the rear edge of arms 118 to engage rear edge lip 78 of first assembly 62 as the second assembly 99 moves counterclockwise about pivot pins 97.

To provide storage for additional roll goods side walls 64 and the lower portion of the front wall 74 of assembly 62 can be extended downwardly below the lower portion of the second assembly 95 to form storage area 128. Side support members 130 are attached to the inner side walls 64 in the storage area 128 and include inwardly and upwardly inclined tab members 132 which permit a roll of roll goods 139 to depress tabs 132 outwardly when force is applied from the bottom toward the top of the second embodiment 60. Once the center core portion 137 of the roll is axially aligned with the tab members 132 the upward force on the storage roll can be stopped allowing engagement between core 137 and tab members 132 to prevent downward movement of the storage roll.

Once assembled the second embodiment dispenser 60 provides an efficient and effective apparatus for dispensing roll goods while at the same time prevents pilferage of the roll goods from the dispenser unless the roll goods are completely unrolled or nearly so. The operation of the second embodiment 60 of the dispenser is best shown with reference to FIGURES 7 through 9. In FIGURE 7 roll goods 135 are pushed upwardly from storage area 128 in the direction shown by the arrow until exterior surface of roll goods 136 makes contact with crosspiece 93 of yoke 89 thereby causing second support member 87 through its axle pins 88 to pivot around the axes 92 and up the first and second cam slots 81 and 108 thereby causing second assembly 95 to pivot about pivot pins 97. As second assembly 99 pivots about pins 97 backstop assembly 105 is caused to rotate clockwise about its pivot point 117 as the inside surface of rear edge lip 78 of first assembly 62 engages cam edge 121 of side support arms 118. As its rotation continues backstop latch finger 122 contacts pivoting latch dog 125 and causes it to rotate in clockwise direction. When contact between finger 122 and dog 125 ends, dog 125 rotates back in a counterclockwise direction until it becomes restrained against further counterclockwise movement by engagement with stop

member 126. Finger 122 is then prevented from counterclockwise movement by its engagement with dog 125.

The full load ready for use position is shown in FIGURE 8. It should be noted that exterior surface 136 of the roll goods 135 is supported at least by three points; that is, convex surface 72 of first support means 68, second support means 87, and third support means 102. For best results third support 102 is positioned along the axis of the force gravity acting on roll 135 regardless of its size. Ribbon 135 is prevented from rearward and downward motion by stop pads 120 located on the lower portion of backstop assembly 105. From the position shown in FIGURE 8, the roll goods can be dispensed through the dispensing aperture 76 formed between the first and third support members 68 and 102. Also shown in FIGURE 8 is the correct position for storage roll 139 with the interior core surface 137 thereof supported against downward motion by tab 132. This support is shown in more detail in the partial section view shown in FIGURE 10.

FIGURE 9 illustrates the position of the various components of dispenser 60 when roll goods 135 have been partially dispensed. It should be noted that second assembly 99 has been pivoted about pivot pins 97 through the action of second support member 87 moving downwardly in first and second cam slots 81 and 108, thus continuing the three point suspension for ribbon 135 throughout its issuance from dispenser 60.

When roll goods 135 have been completely expended, latch finger 122 of backstop assembly 105 becomes disengaged from pivoting latch dog 125 as second assembly 95 is pivoted about its pivot pin 97. Once released from latch dog 125 backstop member 105 completes its counterclockwise rotation to a position as shown in FIGURE 7 permitting a reloading of the second assembly 95 by storage roll 139.

The core of spent roll 135 is withdrawn through dispensing aperture 76. Because of the small dimensions involved, dispensing aperture 76 prevents the user from putting his hand into the second embodiment dispenser 60 in such a manner that a large ribbon could be pilfered. Since all of the operating sequences are cycled by the full loading of second assembly 95 and the subsequent gravity actuation of second support member 87 down along cams 81, 108, dispenser 60 may be cycled a great number of times without requiring maintenance or adjustment. Although this description has made reference to roll goods such as toilet tissue it should be clear to those skilled in this field that simple dimension changes will provide a series of dispensers suitable for dispensing everything from narrow width paper and decorator ribbons to wider hand towels and large rolls of wrapping paper.

What is claimed is:

1. A holder for roll goods comprising:

- a first assembly including a first support member having a support surface for contacting the exterior surface of said roll goods;
 - a second support member having a support surface for contacting the exterior surface of said goods; said second member including axle means extending from the ends thereof;
 - a second assembly pivotally connected to said first assembly and including a third support member having a support surface for contacting the exterior surface of said goods;
 - cam means defined by said first and second assemblies formed to engage and guide said axle means establishing a relative movement between said support members for maintaining contact between said exterior surface and said support surfaces during any changes of diameter of said exterior surfaces.
2. The holder of claim 1 wherein:
- at least one of said support members is a roller having an axis parallel to the axis of said roll goods.

9

3. The holder of claim 1 wherein:
said cam means includes a generally vertically extending portion for permitting said second support member to be guided along said portion through the force of gravity.
4. The holder of claim 3 wherein:
said cam means also includes a locking portion extending generally horizontally from the upper end of said vertical portion for locking said second assembly relative to said first assembly as said axle means engage said locking portion.
5. The holder of claim 1 wherein:
the point of contact between said exterior surface of said goods and one of said support surfaces is in a vertical line extending downwardly from the center of gravity of said goods throughout the travel of said axle means along said cam means.
6. The holder of claim 1 wherein:
said support surfaces are positioned relative to one another with the maximum arc of separation between adjacent support surfaces along said exterior surface equal to 180° throughout the travel of said axle means along said cam means.
7. The holder of claim 1 wherein:
said first assembly includes front and side wall portions extending below said second assembly for establishing a storage area for a spare roll of said goods.
8. The holder of claim 7 including:
side support means supported by said first assembly within said storage area including inwardly and upwardly inclined tab members for permitting said roll goods to depress said tabs outwardly when force is applied to said roll in an upwardly direction and for preventing downward movement of said roll once it is engaged by said tabs.

10

9. The holder of claim 1 including:
locking dog means pivotally supported within said first assembly;
backstop means pivotally supported by said second assembly;
said backstop means including stop pads and latch finger means;
said finger means is positioned to engage said locking dog means during the major portion of said axles transit of said cam means; and
said stop pads during the engagement of said finger and dog means extending into the path of said goods as said goods move along from said first support means for preventing said goods from falling from said second assembly.
10. The holder of claim 1 including:
a dispensing aperture is defined between two adjacent support surfaces for dispensing said goods there-through; and
a cutting edge for severing said goods is defined by one of said assemblies adjacent to said dispensing aperture.

References Cited

UNITED STATES PATENTS

2,839,346	7/1958	Lawalin	225—34	X
2,957,738	10/1960	Marcuse	225—34	X
3,128,024	4/1964	Downham	225—43	

FRANK T. YOST, Primary Examiner

U.S. Cl. X.R.

225—43, 46, 67; 242—55.3; 312—39