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PAPER TOWEL DISPENSER

Filed April 10, 1962

2 Sheets-Sheet 1

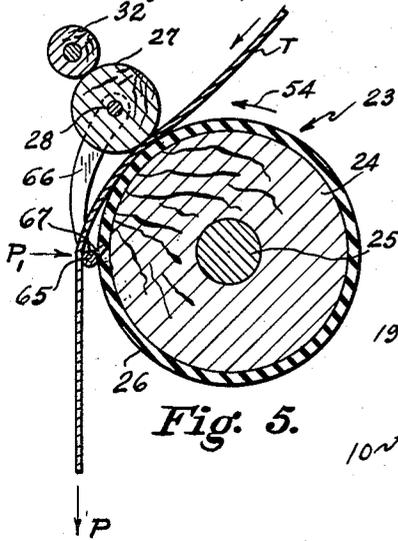


Fig. 5.

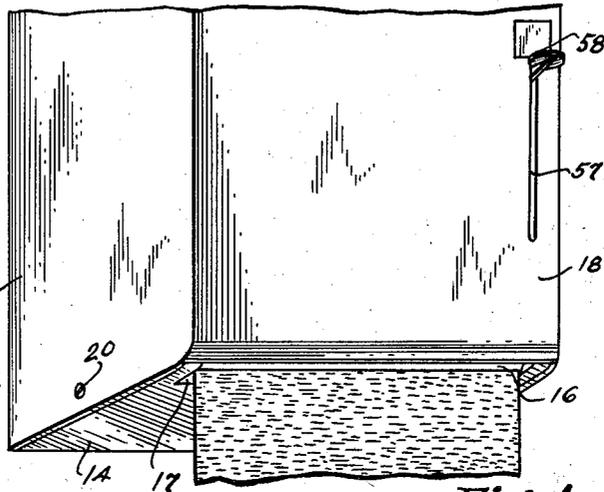


Fig. 1.

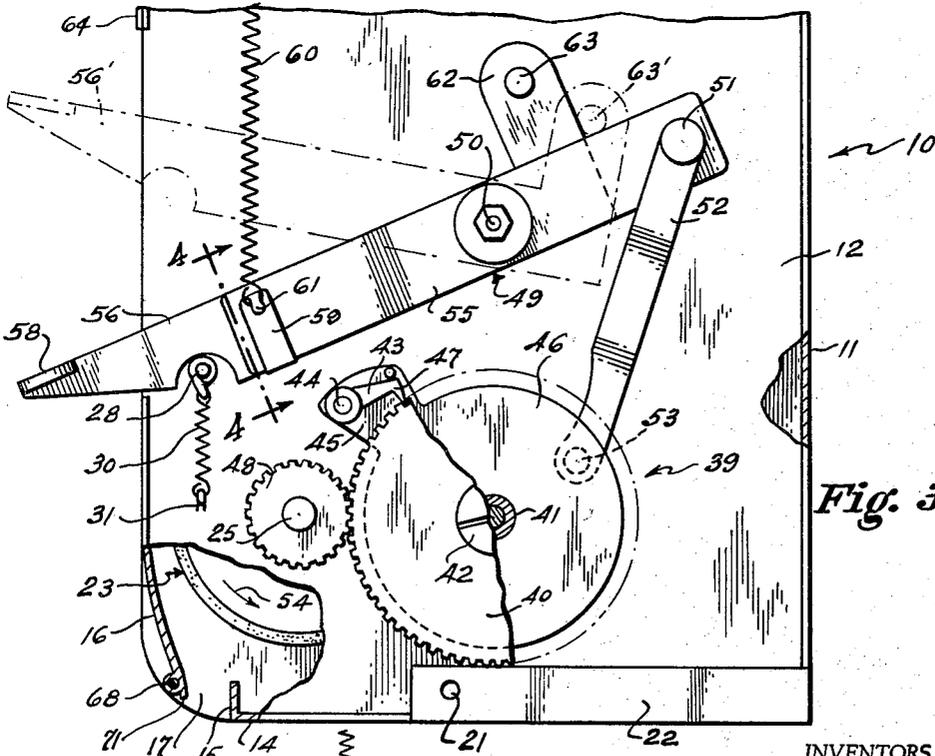
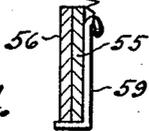


Fig. 3.

Fig. 4.



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2 Sheets-Sheet 2

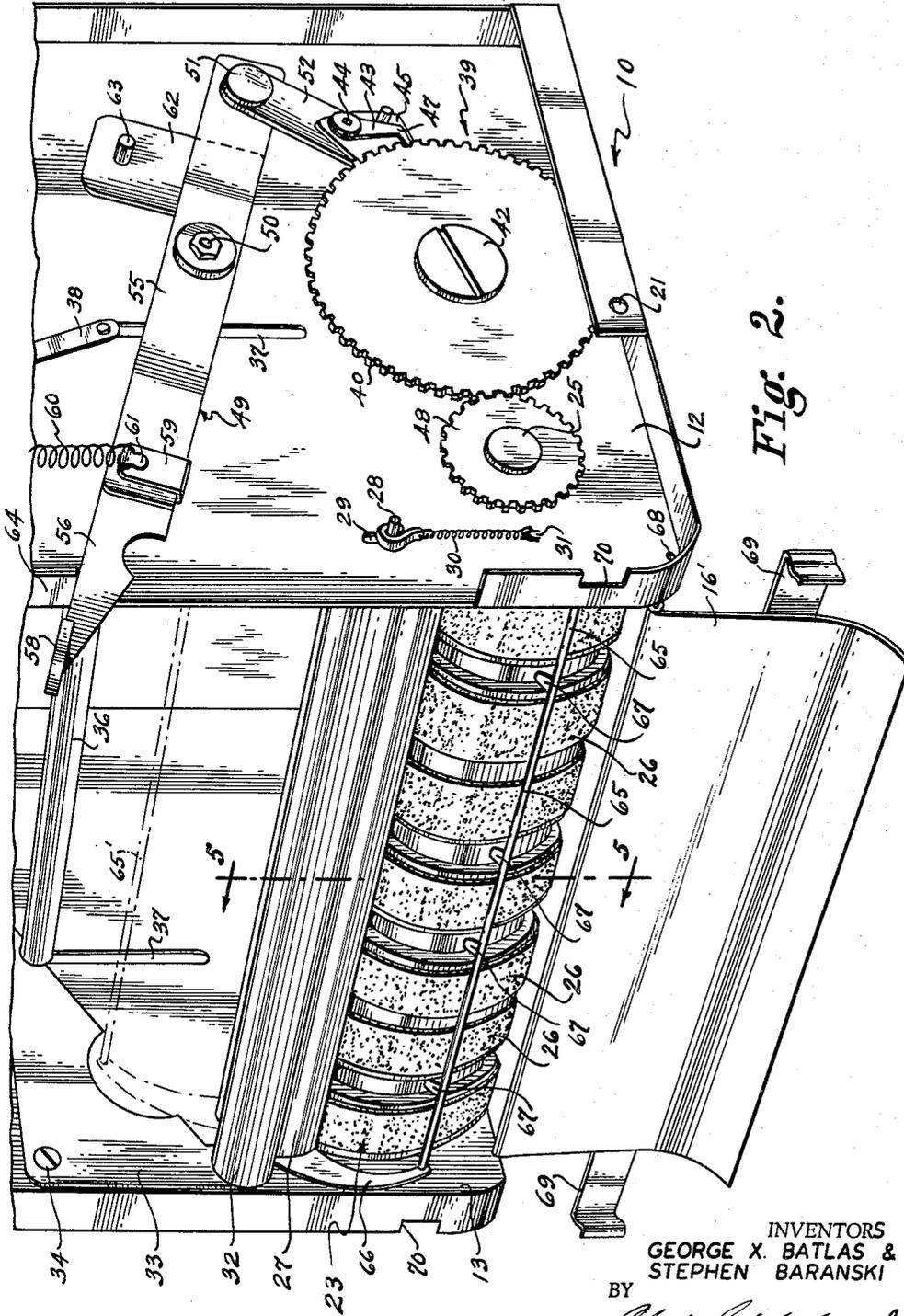


Fig. 2.

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PAPER TOWEL DISPENSER

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9 Claims. (Cl. 312-39)

This invention relates generally to dispensers for paper toweling, and more particularly is directed to dispensers operative to provide separated lengths of paper toweling or other sheet material supplied as a continuous web or strip in either folded or roll form.

Paper towel dispensers of the described character, which are installed in public washrooms and the like, are generally of two types. In the first type, feeding of the continuous web or strip of paper toweling is effected by exerting a pull on the free end of the web in order to expose a predetermined length of the toweling at the exterior of the dispenser housing, whereupon further feeding of the web, by pulling thereon, is interrupted for a controlled period and the exposed length of the toweling can be separated from the remainder of the web by tearing along a serrated or other cutting edge. A dispenser of this type is disclosed in our United States Letters Patent No. 2,974,839, issued March 14, 1961, for Dispensers for Paper Toweling, which dispenser is operative to sequentially feed paper toweling from two rolls thereof contained in the housing. However, paper toweling dispensers of this first type have a disadvantage in use, in that the person seeking to obtain toweling from the dispenser usually has wet hands and, when the free end of the web of paper toweling is grasped for pulling the latter, as described above, the moisture from the wet hands reduces the strength of the paper toweling and the latter is frequently torn before the predetermined length of the latter has been exposed at the exterior of the housing.

The second general type of paper towel dispenser has an actuating member in the form of a hand wheel, crank or lever manipulated by the user to operate a dispensing mechanism which feeds a predetermined length of the continuous web of paper toweling out of a discharge or dispensing slot of the housing whereupon the exposed length of the toweling can be separated from the remainder of the web by tearing along a serrated or other cutting edge. The existing paper towel dispensers of the second type are relatively complex in construction, and this is particularly true of those dispensers including means for preventing removal of paper toweling from the dispenser housing other than by manipulation of the actuating member, for example, by pulling on the exposed free end portion of the web, thereby to avoid waste of the paper toweling by ensuring that only the predetermined length of the latter will be dispensed during each manipulation of the hand wheel, crank or lever provided for that purpose.

Further, the previously existing paper towel dispensing mechanisms of the second type are not capable of fool-proof operation, particularly when embodied in a dispenser intended to dispense paper toweling from two rolls, in sequence, as in the above mentioned U.S. Letters Patent No. 2,974,839, or as disclosed in our copending application for United States Letters Patent, Serial No. 92,795, filed March 2, 1961, for Rolls of Paper Toweling and Dispensers Therefor.

Accordingly, it is an object of this invention to provide a dispenser for paper toweling having an actuating member which is manipulated by the user to cause a predetermined length of the toweling to be exposed through the discharge or dispensing slot of the dispenser housing, which dispenser is of relatively simple construction and further includes simple means operative to prevent further pulling of the paper toweling from the housing.

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Another object is to provide a dispensing mechanism of the described character which is rendered inoperative upon jamming of the paper toweling at the discharge or dispensing slot of the housing thereby to prevent additional accumulations of the paper toweling at the location of the jammed condition or damage to the dispensing mechanism.

A further object of the invention is to provide a dispensing mechanism of the described character which is particularly adapted for inclusion in a dispenser of the type operative to dispense paper toweling from two rolls or folded stacks thereof, in sequence.

More specifically, it is an object of this invention to provide a dispensing mechanism which is rendered inoperative upon serious jamming of the paper toweling at the discharge or dispensing slot of the housing, but which is nevertheless capable of overcoming the increased resistance to dispensing of the paper toweling encountered when the final portion of paper toweling on a first roll is dispensed simultaneously with the initial portion of the paper toweling on a second roll in a dispenser of the kind mentioned above for dispensing paper toweling from two rolls or folded stacks, in sequence.

In accordance with an aspect of this invention, a dispensing mechanism includes a dispensing roller and a pressure roller rotatably mounted adjacent each other so that the web of paper toweling passes through the nip between the two rollers and then downwardly from the surface of the dispensing roller through the discharge slot of the housing, a rockable actuating lever projecting from the housing for manipulation by the user, a pawl and ratchet assembly geared to the dispensing roller and operated in response to rocking and release of the lever to effect turning of the dispensing roller and corresponding feeding of the web of paper toweling so as to expose a predetermined length of the latter through the discharge slot, and a pivotally mounted locking bar movable toward and away from the surface of the dispensing roller and disposed so that the web of paper toweling passing downwardly from the surface of the dispensing roller through the discharge slot travels over the locking bar, whereby a downwardly exerted pull on the exposed free end of the web of paper toweling causes movement of the locking bar against the surface of the dispensing roller to hold the latter against rotation and thereby prevent further feeding of paper toweling from the housing by such pull.

In accordance with another aspect of this invention, the rockable actuating lever is made up of a first lever part operatively connected to the pawl and ratchet assembly and acted upon by a spring urging the first lever part in the direction for effecting rotation of the dispensing roller, and a second lever part projecting from the housing to form a handle for manipulation by the user and being swingable relative to the first lever part in the direction of swinging movement of the latter by the spring so that the second lever part can be manipulated to swing or rock the first lever part in opposition to the spring but, in the event of jamming of the paper at the discharge or dispensing slot so that the spring cannot effect return rocking movement of the first lever part for rotating the dispensing roller, the dispensing mechanism cannot be manually forced through the second lever part, thereby avoiding the danger of increasing the extent of the jamming or of damaging the dispensing mechanism.

However, in order to particularly adapt the dispensing mechanism for use in a dispenser of the type capable of dispensing paper toweling from two rolls or folded stacks thereof, in sequence, the free swinging of the second lever part relative to the first lever part is limited to an angle less than the permitted angular displacement of the second lever part so that, when increased resistance to movement of the dispensing roller is encountered during the com-

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mencement of dispensing of paper toweling from the second roll or folded stack thereof in the dispenser, a small increment of forced movement may be imparted to the pawl and ratchet assembly through the second lever part or handle so as to overcome such slightly increased resistance.

The above, and other objects, features and advantages of this invention, will be apparent in the following detailed description of an illustrative embodiment thereof which is to be read in connection with the accompanying drawings forming a part hereof, and wherein:

FIG. 1 is a fragmentary perspective view of the lower portion of a paper towel dispenser embodying the present invention;

FIG. 2 is an enlarged fragmentary perspective view of the lower portion of the dispenser in FIG. 1, but with the cover thereof removed;

FIG. 3 is a side elevational view of the lower portion of the dispenser of FIGS. 1 and 2;

FIG. 4 is a fragmentary sectional view along the line 4-4 on FIG. 3; and

FIG. 5 is a fragmentary sectional view taken along the line 5-5 on FIG. 2.

Referring to the drawings in detail and initially to FIGS. 1, 2 and 3 thereof, it will be seen that a dispenser embodying the present invention and there generally identified by the reference numeral 10 includes a cabinet adapted for mounting on a wall or other vertical supporting surface and having a back wall 11 (FIG. 3), inner side walls 12 and 13 (FIGS. 2 and 3) with outwardly directed peripheral flanges, and a bottom wall 14 which, at its forward edge, is bent upwardly, as at 15 (FIG. 3), and spaced rearwardly from the lower edge of an arcuate guide piece 16 extending laterally between side walls 12 and 13 to define a downwardly opening discharge slot 17.

The cabinet of dispenser 10 further has a removable cover including a front wall 18 (FIG. 1), side walls 19 extending rearwardly from front wall 18 and spaced laterally apart so that such side walls 19 will be disposed outside of the inner side walls 12 and 13 when the cover is in closed position, and a top wall (not shown). The cover is suitably mounted for providing convenient access to the interior of the cabinet while the latter is supported on a wall or other vertical supporting surface. For example, a screw 20 (FIG. 1) may extend through an opening in each side wall 19 of the cover adjacent the bottom of the latter and into a tapped hole 21 (FIG. 3) formed in a flange 22 on the adjacent inner side wall 12 or 13 of the cabinet so that the cover can swing from a closed position (FIG. 1) forwardly to an open position.

The dispenser 10 includes a dispensing roller 23 having a cylindrical wooden body 24 on an axle 25 (FIG. 5) which projects from the opposite ends of body 24 and is rotatably mounted in suitable bearings carried by side walls 12 and 13 and located so that roller 23 extends across the lower front portion of the cabinet and a vertical plane tangent to the front of roller 23 passes through the discharge slot 17. Dispensing roller 23 further preferably has rubber rings or bands 26 (FIGS. 2 and 5) extending circumferentially around body 24 at axially spaced apart locations thereon for frictionally gripping the paper toweling during dispensing of the latter, as hereinafter described in detail.

A pressure roller 27 (FIGS. 2 and 5) is rotatably mounted above the dispensing roller 23 in front of the vertical plane passing through the axis of rotation of the latter and is yieldably urged toward the dispensing roller to press a web or sheet of paper toweling T (FIG. 5) against the surface of dispensing roller 23 so that the feeding of the paper toweling downwardly through discharge slot 17 can occur only upon rotation of the dispensing roller. The pressure roller 27 is also rotatably mounted on a shaft 28 having its opposite ends projecting axially from roller 27 and being rotatably received in bearings which are slidably accommodated in slots 29 (FIG. 2) extending substantially vertically in the inner side walls

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12 and 13 of the cabinet. Springs 30 (FIGS. 2 and 3) are connected to the opposite ends of shaft 28, or to the bearings rotatably supporting the latter, and to suitable anchors or hooks 31 struck from inner side walls 12 and 13 below slots 29 so as to urge the pressure roller downwardly against the dispensing roller 23.

The dispensing mechanism embodying the present invention is particularly adapted for use in connection with a dispenser of the type containing two supplies of paper toweling which are successively or sequentially dispensed without interruption, as disclosed in detail in our U.S. Letters Patent No. 2,974,839, and in our application, Serial No. 92,795, identified more fully above. For the purposes of the present invention, it is sufficient to state that the dispenser 10 is adapted to first dispense the continuous web of paper toweling which is supplied in the form of a first roll disposed in a lower position within the cabinet and, upon the depletion or exhaustion of the first roll, to then dispense the continuous web of paper toweling which is supplied in the form of a second roll disposed in an upper position within the cabinet. The drawings herein only illustrate some parts of the mechanism required to effect such successive dispensing of the webs from the first and second rolls within the cabinet, the illustrated parts include a control or auxiliary roller 32 (FIGS. 2 and 5) extending laterally across the cabinet adjacent the circumferential portion of pressure roller 27 which is remote from the line of rolling contact of the pressure roller with the dispensing roller 23. The control roller 32 is supported for movement toward and away from pressure roller 27 by means of triangular lever members 33 disposed adjacent inner side walls 12 and 13 and each being pivotally mounted, at one forward corner, on a pivot pin 34 extending from the adjacent side wall (FIG. 2). A roller 36 (FIG. 2) is engageable with the bottom of the first or lower roll of paper toweling (not shown) in the dispenser and is rotatable on a shaft having its opposite ends slidable in vertical slots 37 formed in inner side walls 12 and 13, and roller 36 is urged upwardly against the related roll of paper toweling by means of springs (not shown) connected, through links 38, with the ends of the shaft of roller 36. The triangular lever members 33 are disposed, with respect to their pivot pins 34, so as to normally tend to move control roller 32 away from pressure roller 27, and the back end portions of lever members 33 engage above the shaft of roller 36 so that, as the latter moves upwardly in response to the depletion of paper toweling on the first or lower roll in the dispenser, lever members 33 are rocked thereby to move roller 32 toward pressure roller 27.

As described more fully in U.S. Letters Patent No. 2,974,838, and also in our copending application Serial No. 92,795, identified more fully above, the movement of control roller 32 against pressure roller 27 upon exhaustion of the first or lower roll of paper toweling in the dispenser is effective to commence dispensing of the paper toweling from the second or upper roll thereof in the dispenser. Since the arrangement for effecting the sequential dispensing of paper toweling from the first and second rolls, as such, forms no part of the present invention, the structure and operation thereof will not be described in detail herein, and the above general description of such arrangement has been included merely to define the environment in which the dispensing mechanism embodying this invention is particularly adapted to operate.

In accordance with this invention, rotation of dispensing roller 23 for feeding a predetermined length of paper toweling downwardly through discharge slot 17 is effected through a pawl and ratchet assembly 39 (FIGS. 2 and 3). Assembly 39 includes a ratchet gear 40 rotatably mounted on a stub axle 41 that projects outwardly from side wall 12 at a location in back of the axis of rotation of dispensing roller 23 and receives a screw 42 by which ratchet gear 40 is axially retained on the stub axle. Assembly 39 fur-

ther includes a pawl 43 pivotally mounted on a pin 44 carried by a radical projection 45 of a disk 46 also rotatable on stub axle 41 at the inside of ratchet gear 40. The free end of pawl 43 is shaped as a nose 47, and the force of gravity urges nose 47 against the periphery of ratchet gear 40 during angular displacement of lug 45 with disk 46 between its two extreme positions illustrated in FIGS. 2 and 3, respectively. Nose 47 is shaped so that during angular displacement of disk 46 in the counter-clockwise direction, as viewed on FIGS. 2 and 3, the nose 47 of the pawl skips or glides over the peripheral teeth of ratchet gear 40, whereas, during angular displacement of disk 46 in the opposite or clockwise direction, nose 47 engages between adjacent peripheral teeth of ratchet gear 40 to effect angular displacement of the latter with disk 46. The turning or angular displacement of ratchet gear 40 is transmitted to dispensing roller 23 through a spur gear or pinion 48 which is suitably fixed on the adjacent end of the dispensing roller shaft 25.

In order to effect angular displacement of disk 46, dispenser 10 further includes an actuating lever assembly 49 (FIGS. 2 and 3) which is pivotally mounted, intermediate its ends, on a pivot bolt 50 extending from side wall 12. The back end of actuating lever assembly 49 is connected, as by a pin 51, to a connecting arm or link 52 which is, in turn, pivotally connected to a pin 53 extending from disk 46 at a location spaced from the center of the latter. Thus, rocking of lever assembly 49 from the position shown in FIG. 2 to the position of FIG. 3 causes angular displacement of disk 46 in the counter-clockwise direction, during which angular displacement, ratchet gear 40 remains stationary while the nose 47 of pawl 43 skips over the peripheral teeth of the ratchet gear. During return rocking movement of lever 49 to the position shown in FIG. 2, the nose of pawl 43 engages between adjacent teeth of ratchet gear 40 to drive the latter and thereby effect rotation of dispensing roller 23 in the counter-clockwise direction, as indicated by the arrows 54 on FIGS. 3 and 5, thereby to feed the web T of paper toweling between rollers 23 and 27 and downwardly out of discharge slot 17.

In accordance with the present invention, lever assembly 49 is formed of a first part 55 swingable on pivot 50 and carrying the pivot pin 51 for connection to connecting arm or link 52, and a second part 56 swingable relative to first lever part 55 about pivot 50 and having a forward end-portion projecting beyond the front edge of side wall 12 to form a handle extending through a vertical slot 57 formed in the front wall 18 of the dispenser cover (FIG. 1). The front projecting end or handle of lever part 56 preferably has a lateral enlargement or pad 58 formed thereon to provide a convenient means by which the user can press downwardly on the forward end of lever 49 for rocking the latter from the position of FIG. 2 to the position of FIG. 3.

In order to cause rocking of lever part 55 with lever part 56 during such downward movement of the front end of the latter, a generally L-shaped bracket 59 (FIGS. 2, 3 and 4) is welded or otherwise secured to the forward end portion of lever part 55 and projects laterally from the latter under lever part 56. Thus, during normal downward movement of lever part 56, the latter bears against bracket 59, and through the latter, causes corresponding rocking of lever part 55.

The return rocking movement of lever assembly 49, that is, from the position of FIG. 3 to that of FIG. 2, during which dispensing roller 23 is rotated to dispense paper toweling, is effected by a tension spring 60 secured, at its lower end, to a hook 61 formed on bracket 59 and being anchored, at its upper end, to a pin or the like (not shown) extending from side wall 12. However, if the return rocking movement of lever part 55 is resisted sufficiently so as to overcome the force exerted by spring 60, for example, by jamming of the paper toweling in discharge slot 17, then lever part 56 can be manually rocked

upwardly relative to lever part 55, for example, to the position shown in broken lines at 56' on FIG. 3, without effecting corresponding angular displacement of lever part 55. Thus, in the event of jamming of paper toweling in discharge slot 17, repeated up and down manipulation of lever part 56 constituting the handle will not cause operation of the pawl and ratchet assembly 39, and hence will not effect continued rotation of dispensing roller 23, thereby avoiding either increasing of the jammed condition or damage to the dispensing mechanism.

Since the described dispensing mechanism is particularly intended for use in a dispenser of the type adapted to dispense a web of paper toweling from a first roll and a second roll, in sequence, and since there may be increased resistance to turning of the dispensing roller 23, in such a dispenser, at the moment when the supply of paper toweling in the first roll is almost exhausted and feeding of paper toweling from the second roll commences by reason of the fact that several thicknesses of paper toweling then pass simultaneously between pressure roller 27 and dispensing roller 23, as is described more fully in U.S. Letters Patent No. 2,974,839, lever assembly 49 of the dispensing mechanism is designed to permit the user to impart an increment of forced rocking movement to lever part 55 by upward manipulation of lever part or handle 56 so as to overcome such momentarily increased resistance to turning of the dispensing roller. In order to achieve the foregoing, the back end of lever part 56 has an upward extension 62 and a pin 63 projects laterally from extension 62 over lever part 55. Thus, assuming that increased resistance to rotation of dispensing roller 23 causes lever part 55 to remain in the position shown in full lines on FIG. 3, then lever part 56 is free to be manually rocked upwardly relative to lever part 55 until pin 63 is moved to the position 63' (FIG. 3) in engagement with the top edge of lever part 55, whereupon further upward displacement of lever part 56 to the extent permitted by engagement of the latter with a stop 64 constituted by the bottom edge of a flange projecting laterally from the front of side wall 12 will cause corresponding rocking of lever part 55 and corresponding turning of disk 46 to forcibly angularly displace dispensing roller 23 for overcoming the momentary increased resistance to turning of the latter.

It will be apparent that, after feeding of a predetermined length of paper toweling between rollers 23 and 27 and downwardly through discharge slot 17, a pull exerted on the exposed or free end of the web of paper toweling would cause further feeding of the paper toweling as the corresponding rotation of dispensing roller 23 would merely cause turning of ratchet gear 40 in the clockwise direction relative to disk 46, that is, in the direction in which the nose 47 of pawl 43 merely skips over the teeth of ratchet gear 40. In order to normally avoid such uncontrolled pulling of paper toweling from the dispenser, and consequent waste of the paper toweling, the dispensing mechanism embodying this invention further includes a locking bar 65 (FIGS. 2 and 5) extending laterally between side walls 12 and 13 and normally positioned in front of dispensing roller 23. The opposite ends of bar 65 are supported by arms 66 which are pivotally mounted on the shaft 28 of pressure roller 27. Thus, locking bar 65 is movable toward and away from the surface of dispensing roller 23. Further, locking bar 65 has suitably spaced apart fingers 67 projecting rearwardly therefrom into the circumferential grooves defined on the surface of dispensing roller 23 between the axially spaced apart rubber rings 26 thereby to ensure that the web of paper toweling T passing downwardly from the surface of dispensing roller 23 will travel over, or in front of locking bar 65.

When normal rotation of dispensing roller 23 is effected through manipulation of lever assembly 49 and consequent operation of pawl and ratchet assembly 39, bar 65 merely rides loosely against rubber rings 26 on

dispensing roller 23 and does not resist rotation of the latter. However, when a downward pull is exerted on the free end of the web of paper toweling, as represented by the arrow P on FIG. 5, such pull has a component P₁ urging bar 65 rearwardly against rubber rings 26 on the dispensing roller, whereby bar 65 grips the surface of the dispensing roller and prevents rotation of the latter so that further feeding of paper toweling from the dispenser housing cannot result from the pull P. Thus, the pivotally mounted bar 65 provides simple means for ensuring that paper toweling will be dispensed only by the normal operation or manipulation of the handle part 56 of lever assembly 55. However, if it is desired to permit the feeding of a paper toweling from the dispenser by exerting a pull on the free exposed end of the web of paper toweling, for example, when the dispenser is installed in a hospital or other location where relatively large lengths of paper toweling may be desired, then bar 65 can be swung upwardly and rearwardly to an inoperative position, as indicated in broken lines at 65' on FIG. 2.

In order to permit swinging of locking bar 65 to such inoperative position, the guide plate 16 which normally lies in front of locking bar 65 is pivotally mounted, adjacent its lower edge, on a hinge pin 68 having its opposite ends pivoted in suitable holes in side walls 12 and 13. Thus, guide plate 16 can be swung from its normal operative position shown on FIG. 3 to its released or open position shown at 16' on FIG. 2. Guide plate 16 is releasably held in its normal operative position by means of laterally projecting catches 69 extending from the opposite ends of the guide plate and being engageable in notches 70 formed in laterally directed flanges extending from the front of side walls 12 and 13 (FIG. 2). When guide plate 16 is in its normal operative position, the lower edge 71 thereof constitutes a cutting edge along which each length of paper toweling extended downwardly through discharge slot 17 by operation of the dispensing mechanism can be torn for separation from the remainder of the paper toweling in the dispenser.

Although an embodiment of this invention has been described in detail herein with reference to the accompanying drawings, it is to be understood that the invention is not limited to that precise embodiment, and that various changes and modifications may be effected therein without departing from the scope or spirit of the invention, except as defined in the appended claims.

What is claimed is:

1. In a dispenser for paper toweling, the combination of
 - (A) a housing for containing a continuous web of paper toweling and having a downwardly opening discharge slot,
 - (B) a dispensing roller rotatable in said housing and located so that a vertical plane tangent to said roller at the front of the latter passes through said slot,
 - (C) a pressure roller in rolling contact with said dispensing roller along a line of contact disposed above and in front of the horizontal and vertical planes, respectively, passing through the axis of rotation of said dispensing roller so that a web of paper toweling passing between said rollers is held in frictional engagement with said dispensing roller and passes downwardly from the latter through said slot,
 - (D) manually operable mechanism for effecting rotation of said dispensing roller so that the latter feeds a predetermined length of the web of paper toweling through said slot, and
 - (E) an elongated locking bar extending parallel to the axis of rotation of the dispensing roller and being swingable about an axis located above the bar for free movement toward and away from the surface of said dispensing roller at the front of the latter below said line of contact of said pressure roller with said dispensing roller so that, when a web of paper

toweling passing downwardly from said dispensing roller through said slot travels in front of said locking bar, a pull exerted on the web of paper toweling projecting from said slot urges said locking bar against the surface of said dispensing roller to resist rotation of the latter and thereby prevent further feeding of paper toweling through said slot by said pull.

2. In a dispenser for paper toweling, the combination as in claim 1; wherein said bar has arms extending from the opposite ends thereof and pivoted on the axis of rotation of said pressure roller so as to permit the movement of said bar toward and away from said surface of the dispensing roller, and further to permit upward and rearward swinging of said bar to an inoperative position remote from said surface of the dispensing roller.

3. In a dispenser for paper toweling, the combination of

- (A) a housing for containing a continuous web of paper toweling and having a downwardly opening discharge slot,
- (B) a dispensing roller having axially spaced apart, circumferentially extending grooves in its surface, and being rotatably located in said housing so that a vertical plane tangent to said roller at the front of the latter passes through said slot,
- (C) a pressure roller in rolling contact with said dispensing roller along a line of contact disposed above and in front of the horizontal and vertical planes, respectively, passing through the axis of rotation of said dispensing roller so that a web of paper toweling passing between said rollers is held in frictional engagement with said dispensing roller and passes downwardly from the latter through said slot,
- (D) manually operable mechanism for effecting rotation of said dispensing roller so that the latter feeds a predetermined length of the web paper toweling through said slot, and
- (E) an elongated locking bar extending parallel to said axis of the dispensing roller and movable toward and away from the surface of said dispensing roller at the front of the latter, said bar having rearwardly directed fingers extending into said grooves of the dispensing roller to prevent the passage of a web of paper toweling between said bar and said dispensing roller so that the web passing downwardly from said dispensing roller through said slot travels in front of said bar, whereby a pull exerted on the web of paper toweling projecting from said slot urges said bar against said surface of the dispensing roller to resist rotation of the latter and thereby prevent further feeding of paper toweling through said slot by said pull.

4. In a dispenser for paper toweling, the combination as in claim 3; wherein said dispensing roller has axially spaced apart rubber rings extending circumferentially therearound so that said grooves are defined between adjacent rings and the latter provide frictional contact with the web of paper toweling to prevent slipping of the latter and also with said bar to ensure against turning of said dispensing roller when said bar is pressed against the latter.

5. In a dispenser for paper toweling, the combination of

- (A) a housing for containing a continuous web of paper toweling and having a downwardly opening discharge slot,
- (B) a dispensing roller rotatable in said housing and located so that a vertical plane tangent to said roller at the front of the latter passes through said slot,
- (C) a pressure roller in rolling contact with said dispensing roller along a line of contact disposed above and in front of the horizontal and vertical planes, respectively, passing through the axis of rotation of said dispensing roller so that a web of paper toweling passing between said rollers is held in frictional

engagement with said dispensing roller and passes downwardly from the latter through said slot,

(D) manually operable mechanism for effecting rotation of said dispensing roller so that the latter feeds a predetermined length of the web of paper toweling through said slot, said mechanism including

- (1) a ratchet geared to said dispensing roller to turn the latter in response to turning of the ratchet,
- (2) a rockable lever assembly yieldably urged to rock in one direction,
- (3) a pawl engageable with said ratchet and operatively connected with said lever assembly to turn said ratchet in response to rocking of said lever assembly in said one direction,
- (4) said lever assembly having a handle portion projecting from said housing for manipulation by a user in rocking of said lever assembly in the opposite direction,
- (5) said handle portion being free to swing relative to the remainder of said lever assembly in said one direction so that said lever assembly cannot be forced in said one direction in the event of strong resistance to rotation of the dispensing roller, and

(E) a locking member movable toward and away from the surface of said dispensing roller at the front of the latter so that a web of paper toweling passing downwardly from said dispensing roller through said slot travels in front of said locking member, whereby a pull exerted on the web of paper toweling projecting from said slot urges said locking member against the surface of said dispensing roller to resist rotation of the latter and thereby prevent further feeding of paper toweling through said slot by said pull.

6. In a dispenser for paper toweling, the combination as in claim 5; further comprising means limiting the total swing of said handle portion of the lever assembly, and means limiting the swing of said handle portion relative to said remainder of the lever assembly to an extent less than said total swing so that a slightly increased resistance to turning of said dispensing roller can be overcome by manual displacement of said handle portion in said one direction beyond the limited extent of the permitted swing of said handle portion relative to said remainder of the lever assembly.

7. In a dispenser for paper toweling, the combination of

- (A) a housing for containing a continuous web of paper toweling and having a discharge slot through which lengths of the web are to be dispensed,
- (B) a dispensing roller rotatable in said housing and frictionally engageable with the web so that the latter is fed out of said slot in response to turning of said roller, and
- (C) a mechanism for turning said roller including
 - (1) a rockable lever assembly having a handle portion projecting from said housing for manipulation by a user to cause rocking of said lever assembly in one direction,
 - (a) said handle portion being swingable relative to the remainder of said lever assembly in the opposite direction,

(2) spring means urging said remainder of the lever assembly to rock in said opposite direction,

(3) ratchet means geared to said dispensing roller and

(4) pawl means engageable with said ratchet means and connected to said remainder of the lever assembly to cause turning of said ratchet means, and hence of said dispensing roller, in response to rocking of said remainder of the lever assembly in said opposite direction.

8. In a dispenser for paper toweling, the combination as in claim 7; further comprising means limiting the total swing of said handle portion of the lever assembly, and means limiting the swing of said handle portion relative to said remainder of the lever assembly to an extent less than said total swing so that a slightly increased resistance to turning of said dispensing roller can be overcome by manual displacement of said handle portion in said opposite direction beyond the limited extent of the permitted swing of said handle portion relative to said remainder of the lever assembly.

9. In a dispenser for paper toweling, the combination of

- (A) a housing for containing a continuous web of paper toweling and having a downwardly opening discharge slot,
- (B) a dispensing roller rotatable in said housing and located so that a vertical plane tangent to said roller at the front of the latter passes through said slot,
- (C) means for holding a web of paper toweling in frictional engagement with said dispensing roller prior to passage of the web downwardly from the front of the dispensing roller through said slot,
- (D) manually operable means for effecting rotation of said dispensing roller so that the latter feeds a predetermined length of the web through said slot, and
- (E) an elongated locking bar extending parallel to the axis of rotation of said dispensing roller and being movable toward and away from the surface of said dispensing roller at the front of the latter,

(1) said surface of the dispensing roller having axially spaced apart circumferentially extending grooves therein, and

(2) said bar having rearwardly directed fingers extending into said grooves to prevent the passage of a web of paper toweling between said bar and said dispensing roller,

so that a web of paper toweling passing downwardly from said dispensing roller through said slot travels in front of said bar and a pull exerted on the web projecting from the slot urges said bar against the surface of said dispensing roller to resist rotation of the latter and thereby prevent further feeding of paper toweling through said slot by said pull.

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