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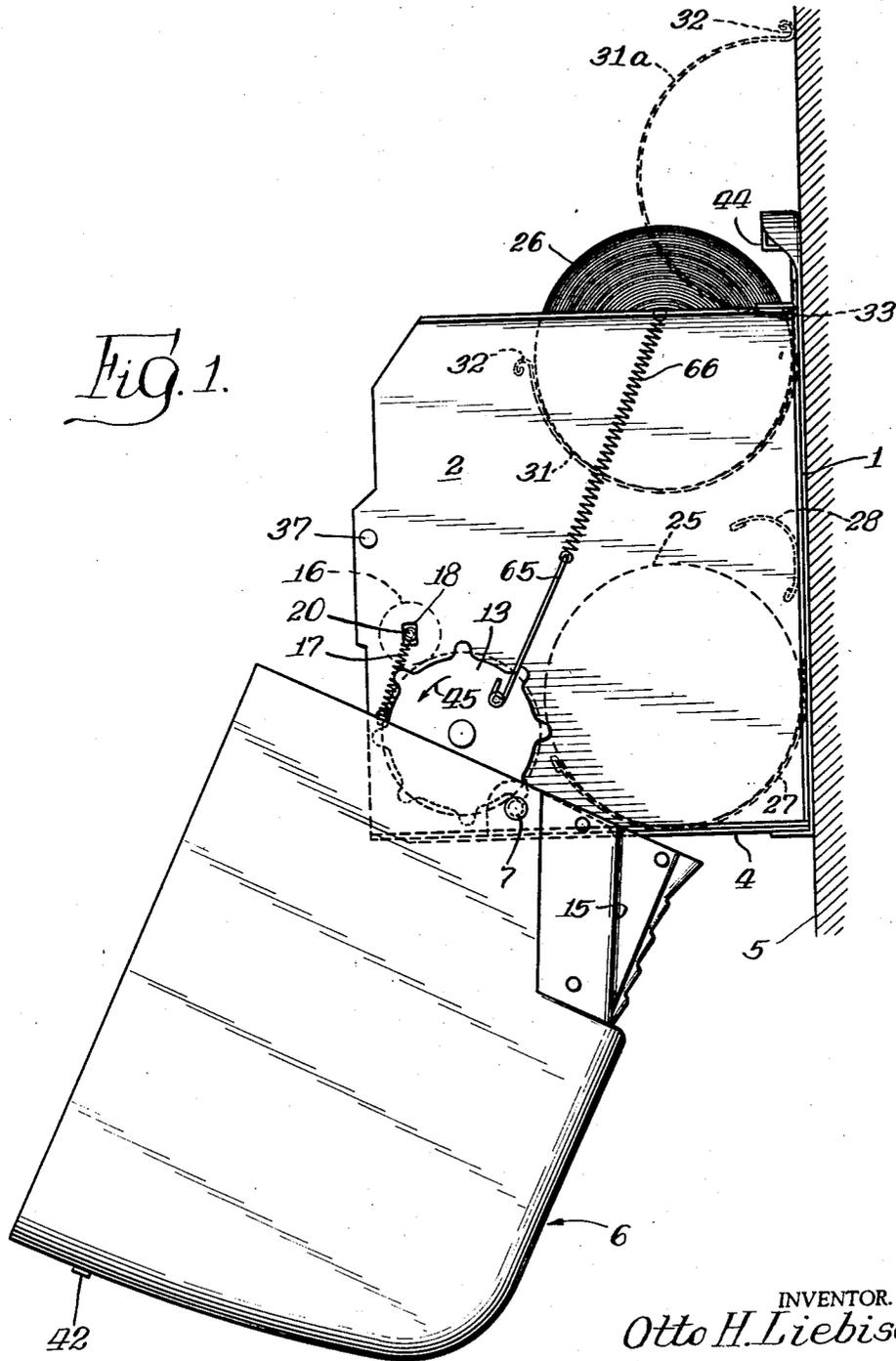
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TOWEL DISPENSING APPARATUS AND METHOD

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4 Sheets-Sheet 1

Fig. 1.



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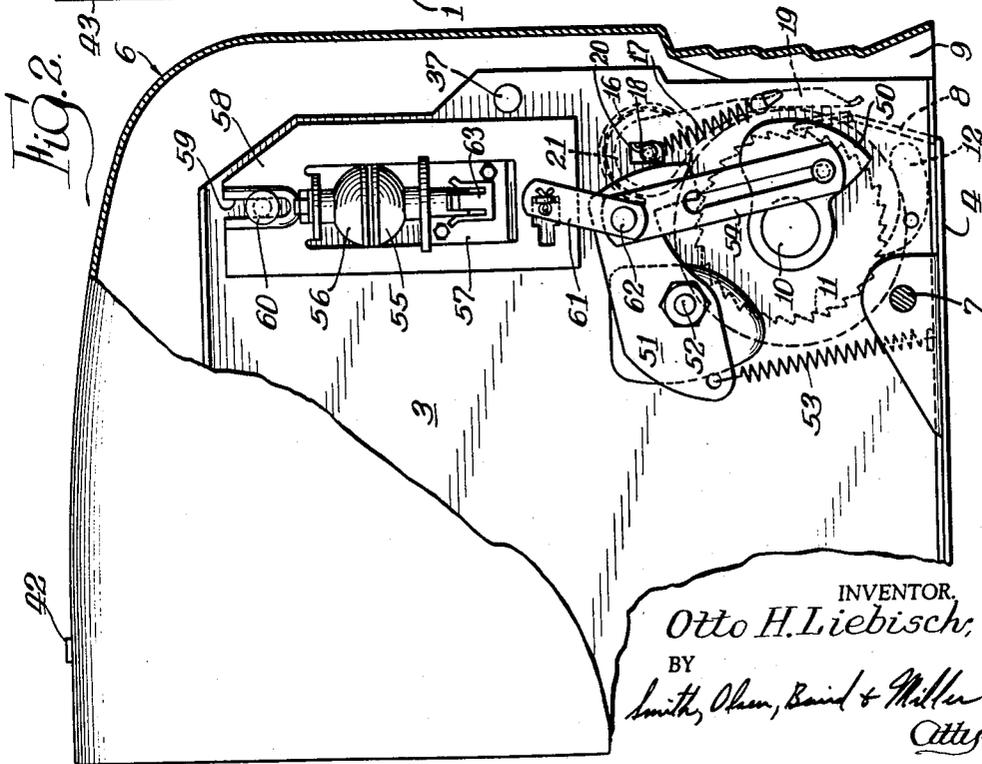
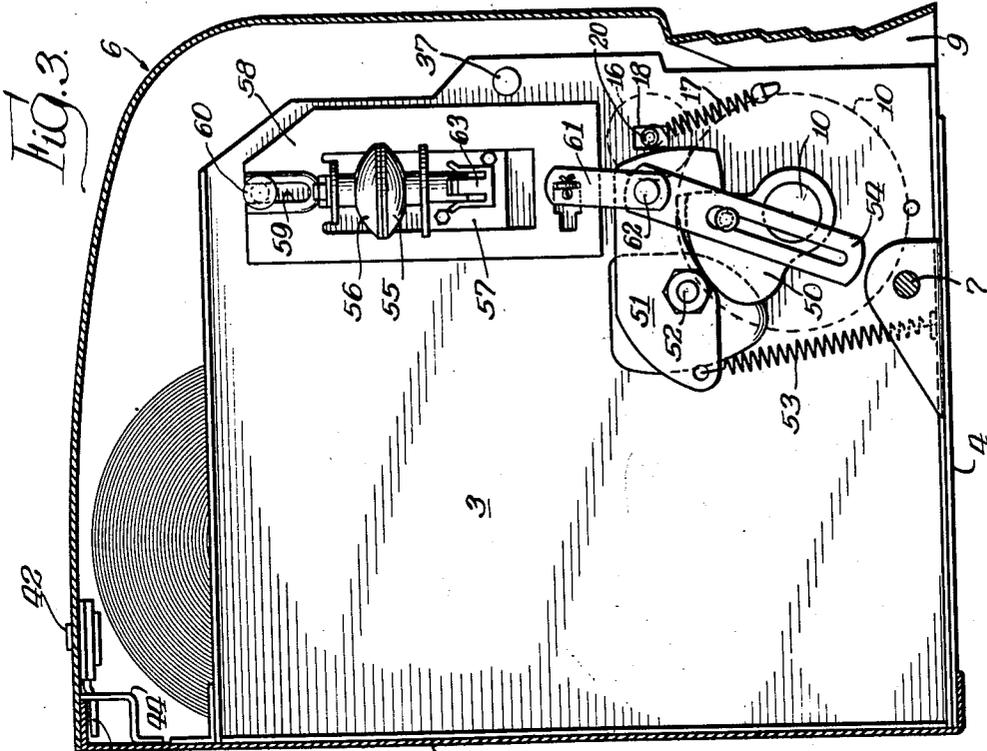
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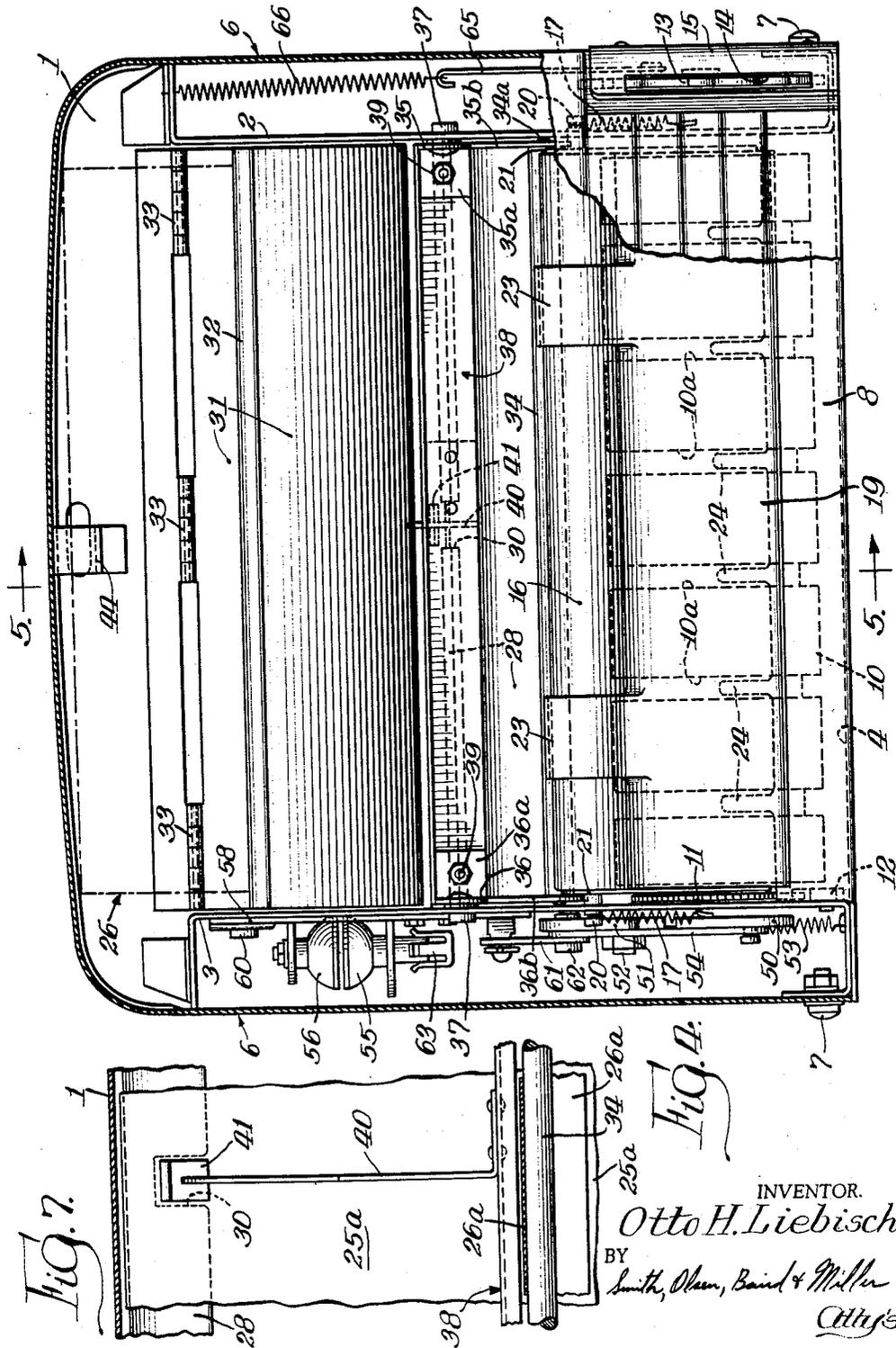
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TOWEL DISPENSING APPARATUS AND METHOD

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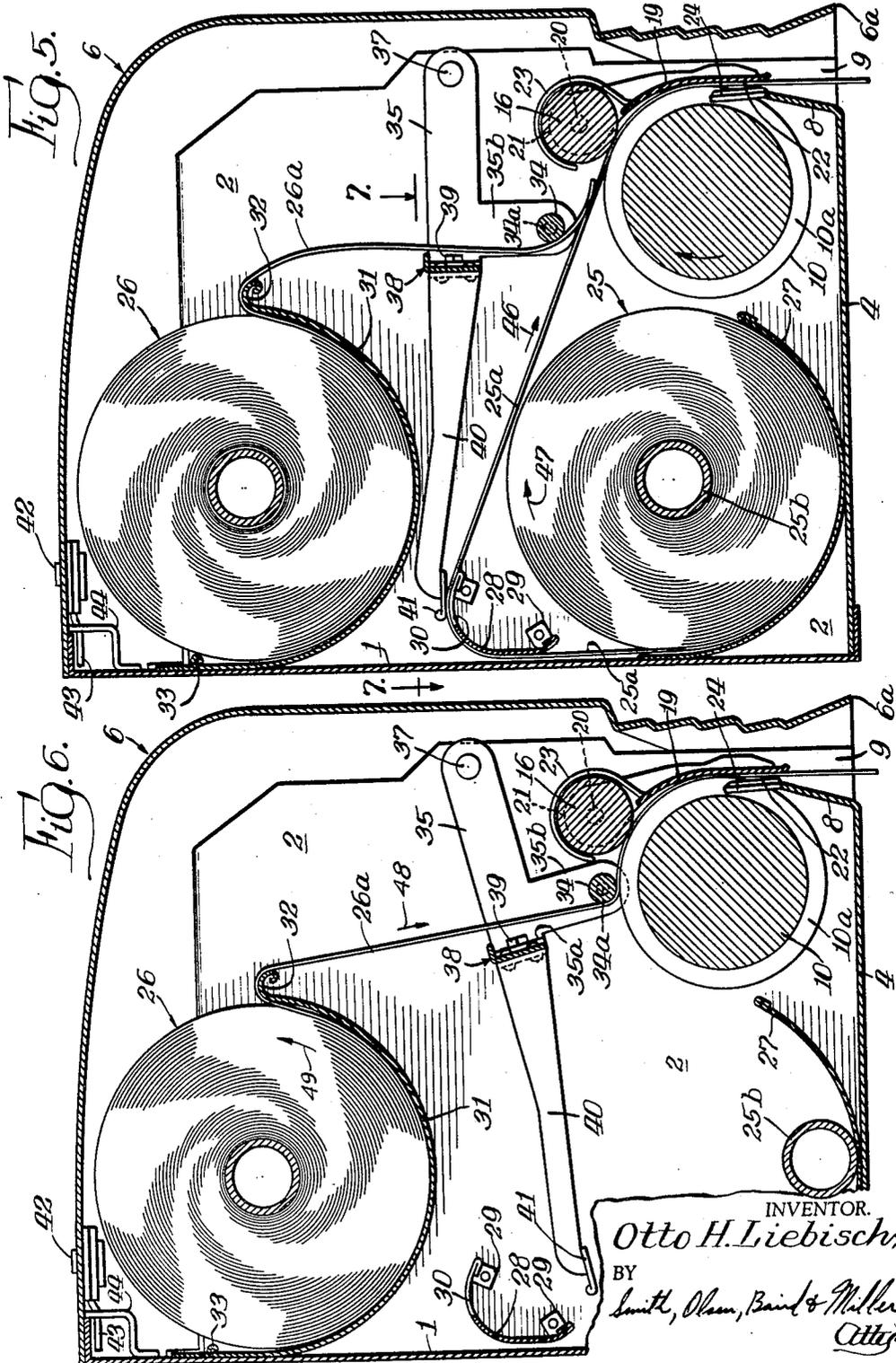
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TOWEL DISPENSING APPARATUS AND METHOD

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4 Sheets-Sheet 4



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2,930,664

TOWEL DISPENSING APPARATUS AND METHOD

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Application March 18, 1957, Serial No. 646,692

9 Claims. (Cl. 312-39)

This invention relates to improvements in paper towel dispensers of the roll type, and more particularly to a paper towel dispenser containing a pair of supply rolls from which the paper is fed successively during dispensing operations.

Paper towel dispensers of the roll type have been widely used for some years, but difficulty and inconvenience has often been encountered in keeping them properly serviced, and substantial wastage of paper has sometimes been involved when an effort has been made to maintain fully adequate service for the cabinets. Such towel dispensers, and particularly those which measure out a predetermined length of paper upon each operation, and dispense the same through a single dispensing opening, have previously utilized a single roll of paper from which the paper has been dispensed. Since the rolls of paper are ordinarily manufactured in more or less standard diameters, and since the diameters must be held within reasonable limits in order to avoid the necessity of inordinately deep cabinets, the total length of toweling that may be dispensed between the servicing and refilling of previously known cabinets, has been limited, for practical purposes, to the length of paper on a standard single roll. This has necessitated frequent servicing of cabinets, and users have often found it necessary to call for servicing and refilling of cabinets at times inconvenient to the janitor or serviceman. Furthermore, when the servicing of these previously known cabinets has been made at sufficiently frequent intervals to avoid having the paper supply become exhausted, it has been necessary for the janitor or serviceman often to remove only partially used rolls of paper and to substitute fresh rolls therefor. This has led to wastage of the paper on the partially used rolls, for many janitors or servicemen have thrown them away. Attempts have been made by some paper jobbers to salvage the paper remaining on such partially used rolls, but this has been relatively expensive and not altogether satisfactory since the paper on the rolls must be unwound and then rewound in order to make up composite rolls of several of the partially used rolls.

One of the principal objects of the present invention is to provide a paper towel dispenser of the roll type adapted and arranged to contain a pair of supply rolls, the paper feed being first from one of the rolls until the supply thereon is exhausted, whereupon the paper feed is automatically picked up from the second roll so that the dispensing of paper will be uninterrupted. Another specific object is to provide a paper towel dispenser of the multiple roll type, operable for automatic feed pick-up from one roll to another in sequence, as described, without changing the positions of the axes of the rolls. Yet another object of the present invention is to provide a new method of dispensing toweling sequentially from a pair of supply rolls, wherein the toweling from the first roll is drawn outwardly and shortly before its supply is exhausted the leading end of the second roll is pressed into firm frictional contact with the tail end portion of

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the first roll, so that the leading end of the second roll is pulled or led to a readily accessible position by the withdrawal of the tail end portion of the first roll.

In accordance with the invention, the present paper towel dispenser is operable to dispense paper towels of predetermined length from continuous rolled sheets, and the dispenser comprises a cabinet having means for supporting a pair of supply rolls, one of which is operative, while the other is held in reserve. After the operative roll has been used up, the next section of paper toweling is dispensed from the reserve roll without changing the position of the reserve roll. This switch-over in towel feed to the reserve roll is effected automatically upon exhaustion of the first roll so that the rolls are successively consumed.

One of the principal advantages of the present invention is that, inasmuch as the towel dispenser contains more than one supply roll, and inasmuch as the towel feed is automatically changed from the first roll to another roll when the first roll is exhausted, the periods between service calls needed to keep the present dispenser supplied with paper are much longer than the periods that have been applicable to most previously known paper towel dispensers of the roll type. Thus, the servicing costs associated with the present dispenser are greatly reduced over the corresponding costs associated with previously known paper towel dispensers. Of equal importance, however, is the fact that the present dispenser eliminates the problem of wastage that has heretofore troubled paper jobbers as a result of the need to remove only partially used supply rolls from the earlier cabinets. In the present dispenser, dispensation of paper is automatically made from the reserve roll when the first roll has been exhausted. Thus, when the serviceman makes his call, the reserve roll will normally be only partially used. Instead of removing this fractional roll from the cabinet, the serviceman may move the partial roll to the position previously occupied by the first roll and may place a full new roll in the reserve position, whereupon the partial or fractional roll will be entirely consumed before any paper is dispensed from the fresh new roll. Use of the present dispenser in the manner just stated entirely eliminates the problem of disposal of partially used rolls and, thus, results in new and important economics in the art of paper towel dispensing.

These and other important objects and advantages of the present invention will be apparent from the following description of a preferred embodiment thereof, taken with the accompanying drawings, wherein:

Fig. 1 is a view in side elevation of a towel dispensing apparatus embodying the present invention and adapted to carry out the new method, the cover for the apparatus being shown in open position and the roll support structure for one of the supply rolls being shown in broken lines in an upper position to which it may be pivoted during servicing of the apparatus;

Fig. 2 is an elevational view of the opposite side of the apparatus with the cover closed, the cover being broken away to show, in its normal inactive position, a stop mechanism which limits the length of toweling that may be withdrawn from the apparatus in a single operation;

Fig. 3 is a view similar to Fig. 2, but showing the stop mechanism in its engaged or activated condition, in which condition it prevents further withdrawal of paper from the apparatus until the stop mechanism has returned to the position shown in Fig. 2;

Fig. 4 is a front elevation of the interior mechanism of the apparatus, with the cover largely broken away and with the reserve paper supply roll being represented by broken lines in the upper portion of the view;

Fig. 5 is a vertical cross-sectional view taken sub-

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stantially along the line 5—5 in Fig. 4, showing the condition of certain parts of the apparatus while paper is being dispensed from the first or lower supply roll, the upper roll being maintained in reserve;

Fig. 6 is a view similar to Fig. 5, but showing the condition of the parts after the supply of paper on the lower roll has been exhausted, the upper or reserve roll thereupon being dispensed from; and

Fig. 7 is a fragmentary plan view taken substantially along the line 7—7 in Fig. 5, showing a control lever or feeler arm which automatically drops from the position shown in Fig. 5 to the position shown in Fig. 6 to bring the upper or reserve roll into play when the lower supply roll has been exhausted.

Referring now to the drawings, the apparatus comprises an inner casing made up of a back wall 1, side walls 2 and 3, and a bottom wall 4, thus providing a structure which is open at the front and the top and which may be secured in any suitable way to an upright wall 5, as shown in Fig. 1. A cover 6 is pivoted at 7 to the foregoing described casing and is swingable about the pivots into the open position shown in Fig. 1. When the cover 6 is in its closed position, its sides embrace and cover the side walls 2 and 3 and enclose the open top and front of the inner casing, as shown in Figs. 2 to 6.

As shown particularly in Figs. 5 and 6, the bottom wall 4 of the inner casing is bent or turned upwardly at its forward end, as at 8, thereby providing with the front wall of the cover 6 a single dispensing opening 9 through which toweling may be withdrawn, the opening being fixed with respect to the cabinet when the cover is in its closed position.

The towel feeding mechanism includes a feed roll 10 journaled in the side walls 2 and 3. The feed roll may be in the form of a grooved roll, as shown particularly in Fig. 4, and may be covered with sandpaper or other friction material so as to assure rotation of the roll as the toweling is drawn across it. At one end, the feed roll is provided with a ratchet wheel 11 cooperating with a pawl 12 pivotally mounted on the side wall 3 so as to prevent reverse operation of the feed roll 10. At its opposite end the feed roll is provided with a manually operable feed wheel 13. This feed wheel is provided in order that a user, if desired or necessary, may manually turn the feed roll so as to project the leading edge of the towel outwardly through the dispensing opening 9 to make the leading edge accessible to the user who will grasp the same and draw the towel out. To this end, the feed wheel 13 projects outwardly through a slot 14 formed in a recessed portion 15 of the front wall of the cover 6 when the cover is closed.

Cooperating with the feed roll 10 and also journaled in the side walls 2 and 3 is a pinch or pressure roll 16 which is pressed into contact with the feed roll 10 by suitable springs 17, the pressure roll being journaled in elongated slots 18 in the side walls 2 and 3 so as to provide room to lift the pressure roll 16 out of contact with the feed roll 10 when the apparatus is being loaded. A guiding apron 19 is pivotally mounted upon the trunnions 20 of the pressure roll 16 by means of rearwardly turned flanges 21 formed at the opposite ends of the apron, the apron hanging downwardly in loose contact with the forwardly directed surface of the pressure roll to form therewith a very narrow dispensing throat 22 through which the toweling passes when it is withdrawn from the cabinet, as will later be explained. If desired, the apron may be provided with upwardly and rearwardly curved straps 23 which may extend over the pressure roll 16.

The upwardly bent or upwardly turned portion 8 of the bottom wall 4 is preferably provided with a plurality of upwardly extending stripper fingers 24 that reside in the grooves 10a of the feed roll 10, as perhaps best seen in Figs. 5 and 6, these fingers being so arranged with respect to the outer surface of the feed roll that

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they prevent the toweling from becoming wrapped around the feed roll, thereby assuring delivery of the toweling through the narrow dispensing throat 22 and through the dispensing opening 9.

As indicated in the introductory portion of this specification, the present towel dispensing apparatus is adapted to receive and contain two supply rolls of toweling that are dispensed therefrom in sequence, the two supply rolls being designated respectively by the numerals 25 and 26 in the drawings. The lower supply roll 25, in the present instance, is rotatably supported in a holder or trough-like receptacle 27 that rests upon the bottom wall 4 behind the feed roll 10 and curves upwardly at its rear to a position in contact with the rear wall 1, as shown in Fig. 5. This trough-like receptacle 27 may be secured to the bottom wall 4 and to the rear wall 1 in any suitable manner and it may also be secured at its opposite ends, if desired, to the inner surfaces of the side walls 2 and 3. The web 25a of the supply roll 25, when the apparatus is loaded or filled, is threaded upwardly behind and then forwardly across the upper surface of a fixed, curved guide member 28 that is located forwardly of the back wall 1 of the apparatus and extends horizontally or laterally across the interior of the inner casing from the side wall 2 to the opposite wall 3, upon which walls it may be fixedly secured as by brackets 29. The web 25a passes over an opening 30 provided in the approximate center of the upper portion of the guide member 28, and is thereupon directed forwardly and downwardly above the body of the supply roll 25 and then between the feed roll 10 and the pressure roll 16. This path of the web 25a from the paper supply roll 25 is best shown in Fig. 5, and it will be seen that this path, after it passes through the line of pressure produced by the pressure roll 16 upon the feed roll, leads around a portion of the circumference of the feed roll under the apron 19, thence downwardly through the narrow throat 22, and finally out through the dispensing opening 9.

The second supply roll 26 is rotatably mounted above the first supply roll 25 in another holder or trough-like receptacle 31 which is provided with a rolled forward edge 32, the receptacle being pivotally mounted at its rear to the upper portion of the back wall 1 by means of a piano type hinge 33, or the like, so that the receptacle, during loading of the cabinet and while the cover 6 is in its open position, may be pivoted upwardly from its normal position (Figs. 5 and 6) to the position indicated in Fig. 1 by the broken lines designated by the numeral 31a. This second supply roll 26 is adapted to rotate in the receptacle 31 when paper is withdrawn from the roll. When the cabinet is first loaded, however, and until after the supply roll 25 has been exhausted, the supply roll 26 is merely held in reserve, the leading end of its web 26a hanging loosely over the rolled forward edge 32 of the receptacle and downwardly and slightly forwardly under a second pressure or pinch roll 34 which will be again referred to. As will later be explained, this second pressure roll 34 is maintained in the raised position shown in Fig. 5, out of pressure contact with the feed roll 10, until after the supply roll 25 is exhausted, the leading end of the paper web 26a in the meantime merely dangling loosely on the web 25a beneath the second pressure roll 34.

The mechanism for controlling the position of the second pressure roll 34 includes a pair of arms 35 and 36 that are respectively pivotally mounted upon the side walls 2 and 3 by means of pivot pins 37 or the like journaled in the side walls. The arms 35 and 36 extend rearwardly and their rear ends are joined by a rigid cross-piece 38 secured thereto and extending laterally across the cabinet behind the path of the web 26a. One suitable construction for this cross-piece is illustrated in Figs. 4, 5 and 6, in the former of which figures the dispenser is illustrated without paper therein so as not to obscure features of the structure. It will be observed

that the rigid cross-piece 38, has the cross-section of an angle member and that it is joined by means of nuts and bolts 39 at its opposite ends to inturned short arms 35a and 36a formed respectively upon the rearwardly extending pivoted arms 35 and 36. Adjacent the center of the cross-piece 38 a rearwardly extending detector or feeler arm 40 is riveted or otherwise fixedly secured upon the cross-piece, the feeler arm 40 having a shoe 41 on its rear extremity adapted to ride upon the web 25a of the lower supply roll 25 directly above the opening 30 in the guide member 28, and to drop downwardly through that opening when the roll 25 has been exhausted and the tail end of the web 25a has been pulled clear of the guide 28.

It will be understood from the foregoing description that the arms 35 and 36, the cross-piece 38 and the feeler arm 40 are joined together as a rigid frame or unit and that the entire unit is adapted to pivot about the axes of the trunnions or pins 37. The second pressure roll 34 is a part of this unit and moves therewith inasmuch as it is mounted between a pair of downwardly extending arms 35b and 36b respectively formed on the arms 35 and 36. In order to give weight to unit just mentioned, and in order that the concentration of the weight will be disposed relatively close to the pivotal axis of the unit, the pressure roll 34 may, if desired, be in the form of a cylindrical metal rod, as shown, and in its preferred form this rod has trunnions 34a formed on its opposite ends and rotatably journaled in the downwardly extending arms 35b and 36b so that the rod or pressure roll may rotate about its own axis.

Although the time-stop mechanism that is shown in Figs. 2 and 3 will be described presently, its use in connection with the apparatus that has already been described is not absolutely essential if one has no desire to limit the length of toweling that may be withdrawn from the cabinet in a single operation. Thus, it will be appropriate at this time to describe the manner in which the dispenser is loaded or serviced, and to describe how the paper feed changes automatically from the supply roll 25 to the supply roll 26 when the former is exhausted.

When servicing of the dispenser is desired, a lock 42 located at the top of the cover 6 is operated to disengage a catch 43 from a stationary bracket 44 fixed upon the wall 1, thereby permitting the cover to be pivoted to its open position shown in Fig. 1. The residue of any roll 26 that may remain in the trough-like receptacle 31 is removed, tearing the extending web 26a if necessary, and the receptacle 31 is then pivoted upwardly out of the way to the position indicated at 31a in Fig. 1. This makes way for the entire unit 35, 36, 38, 40 and the second pinch roll 34 thereon to be pivoted upwardly about the axis of the pins 37 and completely out of the area between the side walls 2 and 3 of the inner casing, thereby making the paper holder or receptacle 27 easily accessible. The core 25b (Fig. 6) of the previously exhausted supply roll 25 is removed from the receptacle 27, and the hand wheel 13 is rotated in the direction of the arrow 45 in Fig. 1 in order to clear any short length of paper that may remain between the feed roll 10 and the pressure roll 16. The machine is then in condition to receive two new rolls of paper although, as mentioned earlier herein, it is preferred that the residue of the roll 26 be used as one of the rolls since that will avoid the problem that would otherwise arise with respect to the disposition of a partially used supply roll. In any event, a new roll 25 (or the residue of the partially used roll 26, as the case may be) is placed in the receptacle 27 and its web 25a is manually threaded upwardly behind the guide member 28, forwardly across the top thereof, and forwardly between the pressure roll 16 and the feed roll 10. The pressure roll 16 may be lifted against the force of the springs 17 so that the web 25a may be pushed downwardly through the throat 22 and out of the dis-

persing opening 9, thereby exposing a short length which later may be gripped by the fingers for withdrawal of further paper. The unit 34, 35, 36, 38, 40 is then pivoted on the pins 37 back into the space between the side walls 2 and 3, the shoe 41 coming to rest upon the web 25a immediately above the opening 30 in the guide member 28 as shown in Fig. 5, the web 25a, through the medium of the feeler arm 40 and its related parts, thereby serving to retain the second pressure roll 34 out of contact with the web 25a and out of pressure relationship with the feed roll 10.

When the unit 34, 35, 36, 38, 40 has been pivoted inwardly to the position last described, the upper paper holder or receptacle 31 is lowered from its position designated by the numeral 31a in Fig. 1, to its normal position shown in Figs. 5 and 6. A new, fresh supply roll 26 is then placed in the holder 31, and its web is manually pulled over the front edge 32 of the holder and threaded downwardly in front of the cross-piece 38 and behind and under the second pressure roll 34 to the position shown in Fig. 5, in which position the leading end of the web 26a merely dangles on the web 25a but is short of contact with the pressure roll 16. The cover 6 is then moved to its closed position and servicing of the cabinet will have been completed.

From a consideration of Fig. 5 it will be understood that when the exposed leading end of the web 25a is gripped by the fingers and pulled, toweling will be fed from the supply roll 25 in the direction of the arrow 46, the supply roll being caused to rotate in the direction shown by the arrow 47. The supply roll 26, in the meantime, is held in reserve. When a desired length of paper has been withdrawn, either by pulling upon the exposed end of the web or by rotation of the hand wheel 13, the withdrawn length may be torn off against the lower front edge 6a of the cover 6, which may be serrated, if desired.

After repeated dispensations of paper from the supply roll 25, that roll will become exhausted. As the tail end of its web is pulled clear of the guide member 28 and the shoe 41, the support for the feeler arm 40 and the unit 35, 36, 38, previously provided by the web 25a, will be eliminated and the shoe and arm 40 will drop through the opening 30 in the guide member 28, thereby permitting the entire unit 34, 35, 36, 38 to drop entirely automatically to the position thereof shown in Fig. 6. This causes the second pressure roll 34 to make pressure contact with the feed roll 10, pinching both the leading end of the web 26a and a substantial length of the tail end portion of the web 25a therebetween. Thus, as the tail end of the web 25a is withdrawn from the dispenser, the leading end of the fresh web 26a is automatically drawn between the pinch or pressure roll 16 and the feed roll 10, and is carried through the throat 22 and partially out of the dispenser opening 9 before the extremity of the tail end of the web 25a clears the feed roll. The feed is thus automatically changed from the supply roll 25 to the reserve roll 26 without interruption and without changing the axial location of the reserve roll. Dispensing from the roll 26 is thereupon carried out until the cabinet is next serviced and reloaded, the web 26a being withdrawn upon each dispensing operation in the direction of the arrow 48, thus causing the supply roll 26 to be rotated in the direction of the arrow 49 shown in Fig. 6.

In a dispensing apparatus of this sort, used for the purpose intended, it is desirable to eliminate as far as possible the wasteful use of toweling. To this end the apparatus is provided with a stop mechanism which becomes operative, after a predetermined length of toweling has been withdrawn, to lock the feed roll 10 against further rotation. It is also desirable that the stop mechanism shall remain engaged for a predetermined length of time so as to prevent too rapid successive withdrawals. To this end, I have incorporated a time control mecha-

nism which will now be described in conjunction with the stop members.

A stop member 50 is mounted on the journal of the feed roll 10 to rotate therewith. A second stop member 51 is pivoted on the side plate 3 as at 52 and is provided with a spring 53 which tends to hold the stop member 51 in its inoperative or inactive position. A slotted link 54 connects the two stop members and is so arranged that as the feed roll 10 is rotated, the rotative movement of the stop 50 will pull the pivoted stop 51 into locking or stopping position. Fig. 2 shows the stop members in their normal inoperative position so that the feed roll 10 may be freely rotated. Fig. 3, on the other hand, shows said members engaged so that rotation of the feed roll 10 is prevented.

The time control mechanism comprises a pair of rubber or plastic vacuum cups 55 and 56. The lower cup 55 is mounted on a plate 57 that is secured to the side plate 3, while the upper vacuum cup 56 is mounted on a slide 58 which has a guide slot 59 engaging a pin 60 on the side plate 3. The slide 58 is also held in position by the fixed plate 57. The bottom of the slide 58 carries a link 61 which is connected to the slotted link 54 at its pivot point 62 on the movable stop 51. The foregoing arrangement is such that, as the movable stop 50 rotates upon rotation of the feed roll 10, the cooperative action of the links 54 and 61 will pull the slide 58 downwardly and press the vacuum cup 56 into engagement with the vacuum cup 55, as shown in Fig. 3. Said vacuum cups are held together by the vacuum thus created and will not separate until sufficient air is allowed to enter into them. The entrance of air is controlled by a valve 63 carried by the vacuum cup 55. This valve is adjustable so that the length of the time that the cups remain vacuum-attached may be regulated for almost any desired length of time from about one second to a much longer time. When sufficient air enters into the evacuated space between the cups, the vacuum attachment is broken and the spring 53 will rock the pivoted stop member 51 about its pivot 52 and will thus restore the slide 58 to its initial position so as to permit another dispensing operation to take place. It will be noted from an inspection of Figs. 2 and 3 that the movement of the slide 58 is in a straight vertical line and that the engagement of the stops 50 and 51 is on a line substantially centrally of the slide 58. By this straight line motion and contact of the stop members, I eliminate to a great extent wear on these parts normally experienced by other arrangements.

From an inspection of Figs. 1 and 4, it will also be seen that the manually operated feed wheel 13 is provided with a wire bale 65 connected to a coil spring 66 or control member secured to the side plate 2. The purpose of this arrangement is to provide an automatic feed-out of toweling through the dispensing opening 9 when the time stop mechanism, previously described, disengages at the end of the predetermined time interval. When toweling is withdrawn, the feed wheel 13 rotates with the feed roll 10, thus stretching the spring 66. But the spring cannot retract so long as the stop mechanism remains engaged. When the stops 50 and 51 separate and the feed roll 10 is again free for rotation, the spring will retract and will cause a rotative movement of the feed roll 10 sufficient to expose the leading edge of the toweling and make it accessible to the user. The user grips the thus exposed leading end of the toweling and withdraws the same from the apparatus until the stops 50 and 51 engage. This halts further withdrawal of paper and the user may tear off the withdrawn length along the lower front edge 6a of the cover (Fig. 5). At the time the stops 50 and 51 have become engaged, the vacuum cups 55 and 56 are likewise engaged, thereby providing a time interval before the stops 50 and 51 are automatically disengaged to free the feed roll for further rotation. During withdrawal of the paper, energy is stored in the

control spring 66 due to rotation of the control wheel through less than one complete revolution, so that when the vacuum cups 55 and 56 time out and the stops 50 and 51 automatically disengage, the energy stored in the control spring automatically rotates the wheel 13 through the remainder of one revolution and back to its original or normal position shown in Fig. 1. This causes the feed roll 10 also to be rotated, thereby automatically discharging further paper and exposing the leading end thereof so that it may again be gripped by a user to begin another cycle of operation. The specific stop mechanism associated with the stops 50 and 51 and the vacuum cups is fully shown and described in U.S. patent No. 2,592,786, dated April 15, 1952, and the structure and action of the automatic feed-out apparatus associated with the hand wheel 13 and just described, are likewise shown and explained in that patent. Further description here, therefore, is not believed to be necessary.

The foregoing description of a preferred embodiment of the present invention and a preferred way of carrying out the method is given for clearness of understanding only, and no unnecessary limitations are intended thereby, for it will be apparent to those skilled in the art that numerous variations may be made therein without departing from the spirit and scope of the appended claims. For example, in the present embodiment, the supply rolls 25 and 26 are shown rotatably supported in trough-like receptacles 27 and 31 for simplicity of illustration and construction. It is, of course, apparent that the supply rolls likewise may be rotatably mounted upon axle or trunnion means. Numerous other changes may be made in the present illustrative structure and in the method without departing from the spirit and scope of the claims.

What is claimed is:

1. In a paper towel dispenser, the combination comprising a cabinet having a dispensing opening fixed with respect to said cabinet when the dispenser is in operative condition, means for supporting a pair of paper rolls in predetermined orderly sequence in said cabinet with the first of said rolls in operative dispensing condition and with the second paper roll in reserve, mechanical means within said cabinet for feeding the paper from each roll to said dispensing opening, and means for automatically rendering the feeding means for the second paper roll inoperative while the first of said rolls remains unexhausted and for automatically rendering said latter feeding means operative as said first roll becomes exhausted, whereby said second roll is set up automatically for dispensation upon exhaustion of said first roll.

2. In a paper towel dispenser, the combination comprising a cabinet having a dispensing opening fixed with respect to said cabinet when the dispenser is in operative condition, means for supporting a pair of paper rolls in predetermined orderly sequence in said cabinet with the first of said rolls in operative dispensing condition and with the second paper roll in reserve, mechanical means within said cabinet for feeding the paper from each roll to said dispensing opening, means including a trigger device for rendering the feeding means for the second roll inoperative automatically while the first roll remains unexhausted and said trigger device is maintained in a first position, whereby the delivery of paper from said second roll to said opening is prevented while said first roll remains unexhausted and automatically operable as said first roll becomes exhausted and said trigger device is allowed to move to a second position for rendering operative the feeding means for said second roll, whereby the latter roll is set up automatically for dispensation, said trigger device being maintained in said first position by paper fed from said first roll and being movable abruptly to said second position when the trailing edge of said first roll passes by said trigger device.

3. In a paper towel dispenser, the combination comprising a cabinet having a dispensing opening, means for supporting a pair of paper rolls in predetermined orderly

sequence in said cabinet with a first paper roll in operative position and with the second paper roll in reserve position, a control member, means responsive to each actuation of said control member through a cycle for feeding a predetermined length of paper from each of the rolls through said dispensing opening, means rendering the paper feeding means for said second roll inoperative automatically while said first roll remains operative for dispensation, and means automatically operable as said first roll becomes exhausted for rendering operative said feeding means for said second roll, whereby the actuation of said control member will cause dispensation of paper from the latter roll.

4. In a paper towel dispenser including a feed roller with a first pressure roller bearing thereon, the combination comprising a second pressure roller biased toward said feed roller, means for rotatably supporting a paper supply roll in position wherein its web may be fed between said first pressure roller and said feed roller for dispensing of paper therefrom, means riding on the web of the paper from said supply roll for overcoming the bias of said second pressure roller and for retaining the same in a retracted position with respect to said feed roller while said web continues to support said bias overcoming means, and means for rotatably supporting a second paper supply roll in a reserve position with the leading end of its web disposed between the retracted second pressure roller and said feed roller, said second pressure roller being automatically and abruptly moved by the biasing thereof into pressure contact with said feed roller to pinch said leading end of the web of said second paper supply roll therebetween when the trailing edge of paper on said first mentioned supply roll passes by said bias overcoming means, thereby setting up said second supply roll for dispensing.

5. In a towel dispensing apparatus having a feed roller with a pinch roller bearing thereon, the combination comprising a movable pressure member adapted to press on said feed roller, means for rotatably supporting a towel supply roll in position wherein its web may be fed between said pinch roller and said feed roller for dispensing toweling therefrom, means responsive to the presence of said web for supporting said pressure member out of pressing relationship with said feed roller, and means for rotatably supporting a second towel supply roll in a reserve position with the leading end of its web disposed loosely between said supporting pressure member and said feed roller, said responsive means permitting said pressure member to move abruptly into pressure relationship

with said feed roller when the supply of toweling in said first mentioned supply roll becomes exhausted, said pressure member thereby pinching the leading end of the web of said second towel supply roll against said feed roller to set up said last mentioned supply roll for dispensing.

6. The combination set forth in claim 5, wherein said response means includes a detecting member adapted to ride upon the web of toweling of said first mentioned supply roll.

7. The combination set forth in claim 5, wherein said responsive means includes a biased member adapted to be engaged and be retained in a predetermined position by the web of toweling of said first mentioned supply roll, said biased member being displaced from said predetermined position when the end of said last mentioned web is reached.

8. The method of sequentially dispensing two separate supply rolls of toweling from a towel cabinet having a roller therein, including the steps of progressively pulling toweling from the first supply roll across said roller and out of said cabinet, pressing the leading end portion of the second supply roll against the radially outer surface of the tail end portion of said first supply roll extending over said roller as said tail end portion is pulled across said roller, in order thereby to withdraw said leading end portion of said second supply roll from said cabinet as the tail end of said first supply roll is withdrawn therefrom, and then progressively pulling the remainder of said second supply roll from said cabinet.

9. The method of sequentially dispensing two separate supply rolls of toweling from a towel cabinet having a single dispensing opening, including the steps of progressively withdrawing toweling from the first of said supply rolls through said opening, pressing the leading end portions of the second supply roll into firm frictional contact with the radially outer surface of the tail end portion of said first supply roll extending over said roller as said tail end portion approaches said opening, in order thereby to draw said leading end portion of said second supply roll from said opening as the tail end of said first supply roll is withdrawn therefrom, and then progressively pulling the remainder of said second supply roll through said opening.

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